

**DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

SOUTHERN REGION HEADQUARTERS

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OFFICIAL RESPONSE OF THE DIRECTOR OF THE CALIFORNIA DEPARTMENT  
OF FORESTRY AND FIRE PROTECTION  
TO SIGNIFICANT ENVIRONMENTAL POINTS RAISED DURING THE  
TIMBER HARVESTING PLAN EVALUATION PROCESS

THP NUMBER: 4-21-00140-CALSUBMITTER: Sierra Pacific IndustriesCOUNTY: Calaveras

END OF PUBLIC COMMENT PERIOD: April 4, 2022

DATE OF OFFICIAL RESPONSE/DATE OF APPROVAL: April 20, 2022

The California Department of Forestry and Fire Protection has prepared the following response to significant environmental points raised during the evaluation of the above-referenced plan. Comments made on like topics were grouped together and addressed in a single response. Where a comment raised a unique topic, a separate response is made. Remarks concerning the validity of the review process for timber operations, questions of law, or topics or concerns so remote or speculative that they could not be reasonably assessed or related to the outcome of a timber operation, have not been addressed.

Sincerely,

Jon Woessner, RPF #2571  
Forester III, Cascade, Sierra & Southern Regions  
Forest Practice Manager

cc: Unit Chief  
RPF, Sierra Pacific Industries, Plan Submitter  
Dept. of Fish & Wildlife, Reg. 4, Water Quality, Reg. 5  
Central Sierra Environmental Resource Center  
Constance Cook  
Rob Hendrickson  
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**COMMON FOREST PRACTICE ABBREVIATIONS**

CAL FIRE	Department of Forestry & Fire Protection	FPR	Forest Practice Rules
CAA	Confidential Archaeological Addendum	LTO	Licensed Timber Operator
CESA	California Endangered Species Act	NMFS	National Marine Fisheries Service
CEQA	California Environmental Quality Act	PHI	Pre-Harvest Inspection
CIA	Cumulative Impacts Assessment	RPF	Registered Professional Forester
CGS	California Geological Survey	THP	Timber Harvest Plan
CSO	California Spotted Owl	USFS	United States Forest Service
DBH	Diameter at Breast Height	WLPZ	Watercourse/Lake Protection Zone
DFG	Department of Fish & Game	WQ	California Regional Water Quality Control Board
DPR	Department of Pesticide Regulation	PCA	Pest Control Advisor
NSO	Northern Spotted Owl	[SIC]	Word used verbatim as originally printed in another document. May indicate a misspelling or uncommon word usage.
CDFW/DFW	California Dept. of Fish & Wildlife		
AB 32	Assembly Bill 32	ARB	Air Resources Board
NPP	Net Primary Production	BOF	Board of Forestry
NEPA	National Environ. Policy Act	CAPCOA	Calif. Air Pollution Control Officers Assoc.
NEP	Net Ecosystem Production	CCR	Calif. Code of Regulations
NTMP	NonIndust. Timb. Manag. Plan	CESA	Calif. Endangered Species Act
OPR	Govm's Office of Plan. & Res.		
Pg	Petagram = 10 <sup>15</sup> grams		
PNW	Pacific NorthWest		
CO <sub>2</sub>	Carbon Dioxide	PRC	Public Resources Code
CO <sub>2</sub> e	Carbon Dioxide equivalent	RPA	Resource Plan. and Assess.
DBH/dbh	Diameter Breast Height	RPF	Registered Professional Forester
DFG	Calif. Department of Fish and Game	SPI	Sierra Pacific Industries
EPA	Environmental Protection Agency	SYP	Sustained Yield Plan
FPA	Forest Practice Act	tC	tonnes of carbon
FPR	Forest Practice Rules	Tg	Teragram = 10 <sup>12</sup> grams
GHG	Greenhouse Gas	THP	Timber Harvesting Plan
ha <sup>-1</sup>	per hectare	LBM	Live Tree Biomass
LTSY	Long Term Sustained Yield	TPZ	Timber Production Zone
m <sup>-2</sup>	per square meter	USFWS	U.S. Fish & Wildlife Service
MAI	Mean Annual Increment	WAA	Watershed Assessment Area
MMBF	Million Board Feet	WLPZ	Watercourse. & Lake Prot. Zone
MMTCO <sub>2</sub> E	Million Metric Tons CO <sub>2</sub> equivalent	yr <sup>-1</sup>	per year

## **NOTIFICATION PROCESS**

In order to notify the public of the proposed timber harvesting, and to ascertain whether there are any concerns with the plan, the following actions are automatically taken on each THP submitted to CAL FIRE:

- Notice of the timber operation is sent to all adjacent landowners if the boundary is within 300 feet of the proposed harvesting, (As per 14 CCR § 1032.7(e))
- Notice of the Plan is submitted to the county clerk for posting with the other environmental notices. (14 CCR § 1032.8(a))
- Notice of the plan is posted at the Department's local office and in Southern-Sierra office in Fresno. (14 CCR § 1032))
- Notice is posted with the Secretary for Resources in Sacramento. (14 CCR § 1032.8(c))
- Notice of the THP is sent to those organizations and individuals on the Department's current list for notification of the plans in the county. (14 CCR § 1032.9(b))
- A notice of the proposed timber operation is posted at a conspicuous location on the public road nearest the plan site. (14 CCR § 1032.7(g))

## **THP REVIEW PROCESS**

The laws and regulations that govern the timber harvesting plan (THP) review process are found in Statute law in the form of the Forest Practice Act which is contained in the Public Resources Code (PRC), and Administrative law in the rules of the Board of Forestry (rules) which are contained in the California Code of Regulations (CCR).

The rules are lengthy in scope and detail and provide explicit instructions for permissible and prohibited actions that govern the conduct of timber operations in the field. The major categories covered by the rules include:

- \*THP contents and the THP review process
- \*Silvicultural methods
- \*Harvesting practices and erosion control
- \*Site preparation
- \*Watercourse and Lake Protection
- \*Hazard Reduction
- \*Fire Protection
- \*Forest insect and disease protection practices
- \*Logging roads and landing

When a THP is submitted to the California Department of Forestry and Fire Protection (CAL FIRE) a multidisciplinary review team conducts the first review team meeting to assess the THP. The review team normally consists of, but is not necessarily limited to, representatives of CAL FIRE, the Department of Fish and Game (DFW), and the Regional

Water Quality Control Board (WQ). The California Geological Survey (CGS) also reviews THP's for indications of potential slope instability. The purpose of the first review team meeting

is to assess the logging plan and determine on a preliminary basis whether it conforms to the rules of the Board of Forestry. Additionally, questions are formulated which are to be answered by a field inspection team.

Next, a preharvest inspection (PHI) is normally conducted to examine the THP area and the logging plan. All review team members may attend, as well as other experts and agency personnel whom CAL FIRE may request. As a result of the PHI, additional recommendations may be formulated to provide greater environmental protection.

After a PHI, a second review team meeting is conducted to examine the field inspection reports and to finalize any additional recommendations or changes in the THP. The review team transmits these recommendations to the RPF, who must respond to each one. The director's representative considers public comment, the adequacy of the registered professional forester's (RPF's) response, and the recommendations of the review team chair before reaching a decision to approve or deny a THP. If a THP is approved, logging may commence. The THP is valid for up to five years, and may be extended under special circumstances for a maximum of 2 years more for a total of 7 years.

Before commencing operations, the plan submitter must notify CAL FIRE. During operations, CAL FIRE periodically inspects the logging area for THP and rule compliance. The number of the inspections will depend upon the plan size, duration, complexity, regeneration method, and the potential for impacts. The contents of the THP and the rules provide the criteria CAL FIRE inspectors use to determine compliance. While CAL FIRE cannot guarantee that a violation will not occur, it is CAL FIRE's policy to pursue vigorously the prompt and positive enforcement of the Forest Practice Act, the forest practice rules, related laws and regulations, and environmental protection measures applying to timber operations on the timberlands of the State. This enforcement policy is directed primarily at preventing and deterring forest practice violations, and secondarily at prompt and appropriate correction of violations when they occur.

The general means of enforcement of the Forest Practice Act, forest practice rules, and the other related regulations range from the use of violation notices which may require corrective actions, to criminal proceedings through the court system. Civil, administrative civil penalty, Timber operator licensing, and RPF licensing actions can also be taken.

THP review and assessment is based on the assumption that there will be no violations that will adversely affect water quality or watershed values significantly. Most forest practice violations are correctable and CAL FIRE's enforcement program seeks to assure correction. Where non-correctable violations occur, civil or criminal action may be taken against the offender. Depending on the outcome of the case and the court in which the case is heard, some sort of supplemental environmental corrective work may be required. This is intended to offset non-correctable adverse impacts. Once a THP is completed, a completion report must be submitted certifying that the area meets the requirements of the rules. CAL FIRE inspects the completed area to verify that all the rules have been followed including erosion control work.

Depending on the silvicultural system used, the stocking standards of the rules must be met immediately or in certain cases within five years. A stocking report must be filed to certify that



the requirements have been met. If the stocking standards have not been met, the area must be planted annually until it is restored. If the landowner fails to restock the land, CAL FIRE may hire a contractor to complete the work and seek recovery of the cost from the landowner.

**The following issues/concerns were raised during the public comment period and are addressed as follows:**

**Concern #1: Wildfire Risk and Hazard**

**My family has owned a cabin in the Dorrington area for the past forty years. The cabin is located approximately five miles down the highway from where the proposed harvesting is to take place. Sections IV, pages 193 -194 of the Grindstone THP (Wildfire Risk and Hazard) describes the THP as being in a very high fire severity hazard zone.**

**In accordance with the Grindstone THP, the project consists of 368-acre timber harvest of which 332 acres is alternative prescription harvest. The alternative prescription harvest described is for all intent and purposes are clearcuts. Given the extensive clearcutting and harvesting operations that have taken place in this area alone in the past 10 to 20 years, there are significant wildfire risks and hazards caused by the proposed project. There are a number of forest fire studies that show clearcut harvesting and subsequent even-age tree plantations leads directly to increase in the intensity and spread of wildfire.**

**A number of recent forest fire studies have shown clearcut harvesting and subsequent even-aged tree plantations lead directly to increase in the intensity and spread of wildfire. Accordingly, we need to protect the "over-story" tree canopy that moderates the "microclimate" of the forest floor. Reduction of the tree canopy which occurs in a clearcut and can occur to a lesser degree in commercial thinning exposes the forest floor to increased sun and wind, causing increased surface temperatures and decreased relative humidity. The temperature increase in turn causes surface fuels to be hotter and drier, resulting in faster rates of fire spread, greater flame lengths and fire line intensities, and more erratic shifts in the speed and direction of fires.**

**The Western Fire Ecology Center states that small-diameter surface fuels (such as even-aged plantations younger than ten years) are the primary carriers of fire. Current fire spread models do not even consider fuels greater than three inches in diameter because it is mainly the fine-sized surface fuels that allows fire spread. Commercial logging operations remove large-diameter fuels which are naturally fire resistant, and replaces them with even-aged plantations with fire-prone small-diameter fuels. Timber plantations are usually comprised of densely-stocked, even-aged stands of young conifers that are extremely flammable and vulnerable to catastrophic fire effects. Consideration should be given to using Selective Harvest rather than Alternative Prescription because of the fire risks associated with the proposed even-aged plantations.**

**Satellite mapping of this last month's Caldor Fire show that even with extensive fuel reduction in the burned areas over the last several years, it had minimal effect on slowing the growth and intensity of the fire. In fact, the younger tree plantations may have contributed to the growth of the fire.**

**In a recent article in the San Francisco Chronicle, it stated "In the wilderness, fire crews couldn't combat the fast-moving flames head-on, instead going in after the fire front moved through to try to save homes and cabins". It is probably time that we starting using our money to home harden communities rather than trying to control wildfires during extreme drought conditions.**

### **Response to Concern #1:**

#### **Fire Hazard Risk and Assessment**

*From the appointment of the first State Board of Forestry in 1885, to the creation of the first State Forester position in 1905, and the organization of the original California Division of Forestry in 1927, the Department of Forestry and Fire Protection (CAL FIRE) has protected the people, property, and natural resources of California. The Department's diverse programs work together to plan protection strategies for over 31 million acres of privately-owned wildlands, and to provide emergency services of all kinds throughout California.*

#### ***-CAL FIRE 2019 Strategic Plan***

As an agency, CAL FIRE fulfills many roles to protect both the public and natural resources of our state. When it comes to operations that can impact both the natural environment and the public, CAL FIRE must review these proposals with an eye towards these two responsibilities. When it comes to a decision of whether to approve a plan, CAL FIRE must exercise professional discretion:

#### **14 CCR § 897 Implementation of Act Intent**

**(d)** *Due to the variety of individual circumstances of timber harvesting in California and the subsequent inability to adopt site-specific standards and regulations, these Rules use judgmental terms in describing the standards that will apply in certain situations. By necessity, the RPF shall exercise professional judgment in applying these judgmental terms and in determining which of a range of feasible (see definition 14 CCR 895.1) silvicultural systems, operating methods and procedures contained in the Rules shall be proposed in the plan to substantially lessen significant adverse Impacts in the environment from timber harvesting. The Director also shall exercise professional judgment in applying these judgmental terms in determining whether a particular plan complies with the Rules adopted by the Board and, accordingly, whether he or she should approve or disapprove a plan. The Director shall use these Rules to identify the nature of and the limits to the professional judgment to be exercised by him or her in administering these Rules.*

## Requirements of Evaluation included in the Rules

The Forest Practice Rules recognize that Timber Operations have the potential to cause and contribute to the severity of fires. The need to protect property and natural resources from fire goes back to the founding of the original Board of Forestry in 1885. Fire prevention laws were the first regulations governing forestry in our state.

Current Forest Practice Laws contain significant detail on how operations are to be conducted to reduce or eliminate the chance that logging will cause a fire. Article 7 of the Rules cover the various methods of reducing fire risk and hazard, collectively called “Hazard Reduction”:

- 917, 937, 957 Hazard Reduction
  - 917.2, 937.2, 957.2 Treatment of [Logging] Slash to Reduce Fire Hazard
  - 917.3 Prescribed Broadcast Burning of Slash [Coast]
  - 937.3 Prescribed Broadcast Burning of Slash [Northern]
  - 957.3 Prescribed Broadcast Burning of Slash [Southern]
  - 917.4 Treatment of Logging Slash in the Southern Subdistrict
  - 957.4 Treatment of Logging Slash in the High Use Subdistrict
  - 917.5, 937.5, 957.5 Burning of Piles and Concentrations of Slash
  - 917.6, 937.6, 957.6 Notification of Burning
  - 917.7, 937.7, 957.7 Protection of Residual Trees
  - 917.9, 937.9, 957.9 Prevention Practices

A primary concern addressed in the Hazard Reduction Rules deals with logging debris left over after trees are harvested. Branches, leaves, and other materials not taken to a sawmill (called “slash”) must be treated in such a way that an increase in fire hazard does not occur, and to prevent the spread of forest-based insects and diseases. For example, the following standard practices shall be followed within the THP area to treat slash:

***917.2, 937.2, 957.2 Treatment of Slash to Reduce Fire Hazard [All Districts]***  
*Except in the [High-Use Subdistrict of the Southern Forest District,] Southern Subdistrict of the Coast Forest District and Coastal Commission Special Treatment Areas of the Coast Forest District, the following standards shall apply to the treatment of Slash created by Timber Operations within the plan area and on roads adjacent to the plan area. Lopping for fire hazard reduction is defined in 14 CCR 895.1.*

- Slash to be treated by piling and burning shall be treated as follows:
  - Piles created prior to September 1 shall be treated not later than April 1 of the year following its creation, or within 30 days following climatic access after April 1 of the year following its creation.
  - Piles created on or after September 1 shall be treated not later than April 1 of the second year following its creation, or within 30 days following climatic access after April 1 of the second year following its creation.
- All woody debris created by Timber Operations greater than one inch but less than eight inches in diameter within 100 feet of permanently located structures maintained for human habitation shall be removed or piled and burned; all Slash

*created between 100-200 feet of permanently located structures maintained for human habitation shall be lopped for fire hazard reduction, removed, chipped or piled and burned*

For this plan, slash treatment will occur within 100 feet of a public road. Also, the area within 200 feet of structures such as in the Cottage Springs area will receive slash treatment. Slash within 100 feet of structure will either be removed or piled and burned. Slash between 100-200 feet of the structure will be lopped, removed, chipped, or piled and burned.

In addition to these regulations for slash treatment, all timber operators are required to have equipment onsite to deal with any fires that start unintentionally. The requirements for the “fire toolbox” are contained in PRC §4428 and are subject to inspection by any CAL FIRE employee.

Furthermore, every Licensed Timber Operator is required to submit to CAL FIRE a Fire Suppression Resource Inventory that contains emergency contact information for each Licensed Timber Operator along with the number of personnel and types of equipment that can be used to suppress any fire. These operators can be called upon to assist CAL FIRE with emergency fire suppression in the area where they are operating, further adding to the resources that can be used during a fire.

In addition to the hazard reduction rules, operations proposed in this plan have additional benefits expected to reduce fire danger.

- Road brushing and maintenance: As part of the Timber Operations, existing roads will receive maintenance to allow for access for logging equipment. These operations ensure that roads used for operations are free of obstruction and can be used during the operations and in the future in the event they are required for fire suppression:

***923.1, 943.1, 963.1 Planning for Logging Roads and Landings. [All Districts]***  
*Logging Roads and Landings shall be planned and located within the context of a systematic layout pattern that considers 14 CCR § 923(b), uses existing Logging Roads and Landings where feasible and appropriate, and provides access for fire and resource protection activities.*

Additionally, any time that burning permits are required (e.g. during the declared fire season), all roads and landings within the harvest plan area must be passable for use during an emergency:

*963.6 (d) When burning permits are required pursuant to PRC § 4423, Logging Roads and Landings that are in use shall be kept in passable condition for fire trucks.*

- New road construction: In addition to the existing roads within the plan area, new seasonal roads are proposed to assist with harvesting. These roads will allow for additional access if necessary for fire suppression.

- Limits on access: New roads within the forest open the potential for unauthorized use by the public, increasing the potential that a fire may occur. The landowner maintains control over access to the plan area using locked gates to discourage trespass.

Maintaining access within the harvest plan area is consistent with the Tuolumne-Calaveras Unit Strategic Fire Plan to allow for rapid extinguishment of fires within CAL FIRE responsibility areas.

When it comes to evaluating the potential for the proposed plan to negatively impact wildfire risk and hazard, the Rules contain the following guidelines:

**Excerpt from Technical Rule Addendum #2:  
WILDFIRE RISK AND HAZARD**

*Cumulative increase in wildfire risk and hazard can occur when the Effects of two or more activities from one or more Projects combine to produce a significant increase in forest fuel loading in the vicinity of residential dwellings and communities.*

*The following elements may be considered in the assessment of potential Cumulative Impacts:*

- 1. Fire hazard severity zoning*
- 2. Existing and probable future fuel conditions including vertical and horizontal continuity of live and dead fuels.*
- 3. Location of known existing public and private Fuelbreaks and fuel hazard reduction activities.*
- 4. Road access for fire suppression resources.*

The Rules specify that an RPF must evaluate potential impacts that could be caused by the project. Timber harvesting is not required to lower wildfire risk and hazard, although this is common from properly designed and implemented operations.

#### Evenage Management and Plantations Impact on Fire Hazard

The total acres proposed for evenage management is 332 acres. Thus, 332 acres of the THP area will be replanted. Item #14 of the plan describes that this area will be planted with enough tree to meet the minimum stocking standard of 125-point count (which would be at least 125 trees per acre).

Comment letters expressed concern with the potential fire risk associated with plantation management. As one would expect, CAL FIRE has concerns about responsible forest management as well as protecting lives and property. If there is a significant increase in risks associated with plantations, CAL FIRE needs to ensure that those risks are mitigated to protect life and property. Not only must we be concerned with protecting the public, but our employees as well which must go into these forested landscapes to fulfill their mission.

All CAL FIRE employees, no matter where they serve, are available to assist with emergency assignments at any time. For example, the CAL FIRE Inspectors for the Tuolumne and Calaveras County area as well as the Tuolumne-Calaveras Unit Forester are also emergency

responders who are often some of the first people to arrive on scene to a fire. They fill a variety of roles as part of an emergency response and understand their duties as foresters can impact the safety of other emergency responders. Proposed harvesting plans are reviewed with both natural resources and public safety in mind.

The public is justified in being concerned about how logging operations can impact fire danger, and it is appropriate that CAL FIRE respond adequately to these concerns. The first concern related to fire hazard is the one posed by tree plantations, and their potential to cause fires to burn hotter and faster.

While there is literature studying the effects that plantations have on fire behavior, a clear cause and effect relationship between plantations and fire danger has not been established. This is primarily because there is a great deal of variability in how plantations are managed. This is especially true with private California timberlands as described below.

CAL FIRE has reviewed many studies on how fires burn within managed and unmanaged landscapes. Often, concerns related to fire behavior and plantations are added as public comment, referring to one of more of these studies. A brief discussion of those studies is provided below for context.

- Wildfire Effects Evaluation Project – Umpqua National Forest (Morrison, Marshall, Minor, & Davis, 2003)
  - *Fire burned most plantation areas with high intensity and spread rapidly through the canopy of these young stands. However, surface-fire intensity was moderated because fuel accumulations on the ground were relatively light. Thus, many plantations experienced moderate-fire severity (high intensity, low heat).*
  - *Fifty-five percent of the plantation areas within the 2002 fire perimeter burned as stand-replacement fires (Appendix A). Plantation mortality is disproportionately high compared to the total area that plantations occupied within the fire perimeter. In fact, mortality in plantations accounted for 41 percent of all mortality on the fires, while the plantation area represented only 22 percent of the total area within the fire perimeter. Younger-age plantations were damaged more than the older plantations and the unmanaged forest (Figure 17: Stand Replacement Mortality in Managed (Regen) and Unmanaged Stands). In fact, 74 percent of plantations 20 years old or less experienced stand replacement mortality. By comparison, mortality was only 40 to 50 percent in stand 21 to 50 years old. (Page 19-20)*
  - *Research in the moderate-severity fire regime of the mixed-evergreen forest of northern California showed a strong relationship of 1987 fire damage in plantations to fire damage levels in adjacent stands (Skinner and Weatherspoon, 1996). Data suggest that fuel treatments within dispersed locations alone may not reduce fire hazard. (Page 20)*

- *Fuel Model 5 best represents the early-seral vegetation including shrub communities and even-aged young plantations. As noted previously, these early-seral stands cover a greater portion of the landscape today than occurred historically. Crown fire spreads readily through these young stands: rates of fire spread can be high, and significant areas of mortality can occur in and adjacent to these stands. (page 25)*

When CAL FIRE reviewed this study, it was noticed that the plantations were classified under fuel (Anderson, 1982). Anderson described these fuels as follows:

*“Fire is generally carried in the surface fuels that are made up of litter cast by the shrubs and the grasses or forbs in the understory. The fires are generally not very intense because surface fuel loads are light, the shrubs are young with little dead material, and the foliage contains little volatile material. Usually shrubs are short and almost totally cover the area. Young, green stands with no dead wood would qualify: laurel, vine maple, alder, or even chaparral, manzanita, or chamise.”*

An examination of representative photos included in the Morrison study showed conifer plantations with a continuous shrub understory. Fuel loading appeared to be high and there was no apparent break in either the vertical or horizontal continuity of fuels. Under these conditions, it is not surprising that young plantations suffered a high degree of mortality. It must be pointed out, in contrast, that plantations on private timberland in California receive a degree of post-harvest cultural treatments (either via mechanical, fire or herbicide treatment) that prevents the level of shrub and fine fuel buildup noted in the Morrison study. As a result of this important difference, CAL FIRE cannot draw a reasonable cause and effect conclusion between the conditions found in the Morrison report and the THP area.

- Southwest Oregon Biscuit Fire: An Analysis of Forest Resources and Fire Severity (Azuma, Donnegan, & Gedney, 2004)

In this study of burn severity following the Biscuit Fire, the Forest Service found that the areas with the highest fire severity were most closely correlated with low site (i.e. Poor growing conditions - Site Class IV, V, and VI), and non-stocked areas (areas that are brush dominated). Table 11., from the report appendix shows that 74% of the non stocked (brush) areas burned with high and moderate severity while 100% of the stands classified as seedling/sapling (<5" DBH) burned with low severity. Results of another study in the same area (Thompson, Spies, & Ganio, 2007) on stands logged and planted after a 1987 fire indicated an increase in fire behavior and mortality in logged stands but noted that these stands had lower conifer densities and more brush than typical plantations. Other studies in the area (Raymond & Peterson, 2005) did not

have a statistically valid sample of stands necessary upon which to validate the accuracy of fire behavior in stands they had previously harvested. From an examination of these studies, a direct causal link between plantations and increased fire danger could not be established.

What was apparent from an examination of the literature was the difference between the plantations evaluated in those studies and those that are managed in California. For the most part, plantation density is managed below densities required to sustain independent crown fire (Peterson, et al., 2009). These stands are also managed during the early successional period to remove or restrict the growth of competing vegetation that can carry fire from the fine fuels into the crowns of the trees.

- Effects of Timber Harvest Following Wildfire in Western North America (Peterson, et al., 2009)

*The forest developing after wildfire or postfire logging may, over time, also constitute a fire hazard because trees can act as part of the understory fuelbed. As crowns emerge from the shrub layer, the low canopy base height creates torching potential (cf. Scott and Reinhardt 2003). If the stand is dense (e.g., 10-cm d.b.h. trees at a density of >1200 per ha), canopy bulk density may be high enough (>0.12 kg/m<sup>3</sup>) to carry independent crown fire under severe fire weather. Canopy base height will eventually increase, reducing torching potential. Fuel dynamics can also be affected by site productivity. For example, in the Olympic Mountains (Washington), fine fuel mass following fire at a productive site (Agee and Huff 1987) was higher than short-term fine fuel mass following fire on drier sites (table 2). In southwestern Oregon, sites burned with high-severity fire had lower fine fuel loads than unburned sites, but on the Olympic site, fuel mass in the first year postfire was twice that of unburned forest primarily owing to branch fall caused by a windstorm during the first postfire winter.*

The fire hazard mentioned in the Scott and Reinhardt study appears to be for plantations where competing vegetation has not been treated, thereby providing a ladder of fuels to carry fire into the crowns. When the hazard is reduced (If the competing vegetation was treated and not present) it stands to reason that the early hazard would be mitigated. The study also says that it would require approximately 485 trees per acre of higher density to carry independent crown fire, under severe fire weather conditions. Most plantations are planted at an initial density lower than this, with the new stocking standards allowing for as little as 125 trees per acre. As will be shown below, this results in a significant reduction in both vertical and horizontal continuity. Also, the number of days where severe fire weather would occur is low, relative to the number of days in a year, further lowering the risk.



- Fire-Silviculture Relationships in Sierra Forests (Weatherspoon, 1996)

Weatherspoon, studying the effects of fire damage on managed and unmanaged stands, noted that plantations were damaged at a higher rate than the unmanaged stands, but also noted the shift in management technique that the forest service had used in the recent past, which took the evaluated stands on a trajectory that differs significantly from those on private timberlands:

***“In recent years, however, concerns over air pollution from burning and adequate retention of soil cover and large woody debris have led managers to forego site preparation and plant through untreated slash on some units. Depending on the site, clearcut units generally have been planted either with ponderosa pine (*Pinus ponderosa* Doug. ex Laws.) or Douglas-fir (*Pseudotsuga menziesii* [Mirb.] Franco) seedlings, or combinations of the two species. Until the early 1980s, plantations routinely were sprayed with herbicides to release conifer seedlings from a wide variety of competing plant species. Since then, restrictions on use of herbicides have led to fewer plantations being released, and those mostly with hand tools. No recorded precommercial thinning was done in plantations affected by the 1987 fires.”***  
[Emphasis added]

In the study area, hazard reduction, site preparation, competing vegetation treatment and precommercial thinning (all common on private forestlands) were not applied. Further in his study, Weatherspoon noted that the increased damage to plantations was more due to the size of the trees and their position in relationship to fine fuels, the primary driver of fire behavior. What Weatherspoon identified as the single biggest indicator of fire danger, as noted above, was the method chosen for site preparation:

***“Site preparation method (as represented by dummy variables) was the only factor related to uniformity of damage, and it was highly significant. Untreated plantations burned quite uniformly (and severely), and differed markedly from treated units in terms of uniformity of damage. Broadcast burned units showed the greatest tendency for fire damage to decrease from the edge of the unit inward- i.e., for the plantation apparently to retard the spread and intensity of the fire. They differed significantly from machine piled units, which tended more towards a spotty burn pattern. No instances were observed in which fire damage increased from the edge of the plantation inward. Further Quantification of results related to uniformity of damage probably is not warranted, given the subjective nature of this variable.”*** [Emphasis Added]

Also noted above was the observed decrease in damage to plantations the further the observation was made from the adjacent stand, suggesting that damage to the plantation was influenced by the fire behavior of the non-evenage stand. This could be because radiant heat damage from the adjacent stand created an increase in crown scorch near the edge of the plantation, but that as the fire moved into the fine fuels of the plantation, intensity and crown scorch decreased. As has been stated above, CAL FIRE could find no direct nexus between evenage management, in and of itself, and an increase in fire danger.

- Reburn severity in managed and unmanaged vegetation in a large wildfire (Thompson, Spies, & Ganio, 2007)

*The Biscuit Fire tended to burn at relatively high severity in young naturally regenerated stands and even more severely in young conifer plantations of comparable age and fire history. This suggests that young forests, whether naturally or artificially regenerated, may be vulnerable to positive feedback cycles of high severity fire, creating more early-successional vegetation and delaying or precluding the return of historical mature-forest composition and structure.*

*It should be noted, however, that many of the plantations examined in this analysis had lower conifer densities and a larger component of shrubs and hardwoods than would be found in typical intensively managed plantations of the same age (11–14 years).*

This is consistent with the findings of the Azuma, Donnegan, & Gedney, 2004 report where it disclosed a disproportionate number of low site acres in the fire area (IV and lower). It was these low site acres that burned the hottest, presumably due to the presence of brush that created a continuous and receptive ladder to carry fire into the tree canopy.

*Reducing connectivity of surface fuels at landscape scales is likely the only way to decrease the size and severity of reburns until vertical diversification and fire resistance is achieved*

The process of breaking up the horizontal and vertical continuity of fuel within plantations is achieved through the control of competing vegetation (e.g. brush) and controlling the density of trees in the plantation (through precommercial or commercial thinning).

- Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape (Zald & Dunn, 2018)

As with other studies reviewed above, there are myriad differences between California and Oregon forestry practices that must be considered. The primary author of the study (Zald) was contacted on April 8, 2019 to inquire about applicability of this study to areas in California. The author was cautious about applying the study results outside of the geographic region and context of the study. The study itself provides numerous

caveats that must also be considered when determining how applicable the results are to a particular area. For example, the plantations on the O&C lands mentioned in the study are typically managed on a 30-50 year harvest rotation. The harvest rotation ages in the study area are well below those found in California, by as much as half the minimum age for Site 1 timberland. Also, precommercial and commercial thinning is not a common practice in plantations in the Pacific Northwest. California plantations receive both pre-commercial and commercial thinning treatments in addition to other vegetation management treatments (e.g. site preparation, herbicide treatments) that appear to be lacking in the study area. These practices align with the authors descriptions of measures that would reduce fire severity and further differentiate the study area from California forests. For example, the author provides suggestions on measures that would reduce fire severity, one being, “increasing the age (and therefore size) of trees and promoting spatial heterogeneity of stands and fuels is a likely means to reducing fire severity, as are fuel reduction treatments in plantations.” When compared to the study area, California plantations are grown to an older age and receive fuel reduction treatments in the form of precommercial thinning and commercial thinning.

### ***Visual Comparison of Plantation Density***

The differences in management between Oregon and California (and between federal and private lands) cannot be understated. Most of the studies discussed above were from plantations on Federal lands, or on lands in Oregon that were managed much differently in California.

Below is a visual demonstration of the difference in plantation stocking between lands similar to what was described in (Zald & Dunn, 2018) and those that will be planted for this THP. The stands on the left are planted at 400 trees per acre and those on the right are planted at 125 trees per acre. The top picture is the stand at 30 years of age and the bottom is 10 years. Visually you can see the crowns on the left side of the screen are much closer, allowing fire to carry easier from tree to tree.



Figure 1. Top-down view of planting density (400 on the left and 125 on the right). Images on top are the stand at 30 years and the bottom is 10 years of age. Image generated using Visual Stand Designer (<https://visualforester.com/>)

If trees are planted at a lower density, and competing vegetation is controlled to the point where there is little to no horizontal or vertical continuity, the fire danger within the plantation is minimized until the point where the crowns are well above the surface fuels.





Figure 2. Side view of a 10 year old plantation with 400 trees per acre. Image generated using Visual Stand Designer (<https://visualforester.com/>)



Figure 3. Side view of a 30 year old plantation with 400 trees per acre. Image generated using Visual Stand Designer (<https://visualforester.com/>)



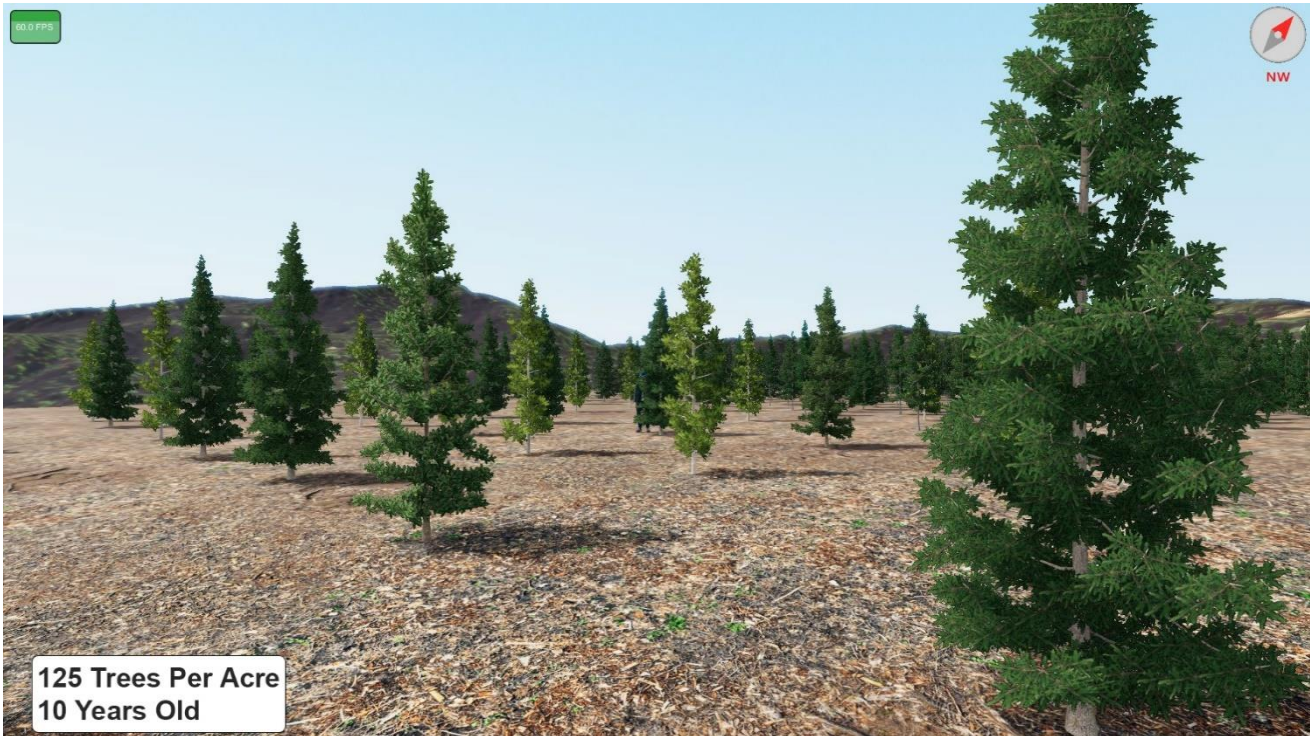


Figure 4. Side view of a 10 year old plantation with 125 trees per acre. Image generated using Visual Stand Designer (<https://visualforester.com/>)



Figure 5. Side view of 30 year old plantation with 125 trees per acre, Image generated using Visual Stand Designer (<https://visualforester.com/>)

Beyond the stand level one must look to the larger landscape to understand the context of individual stands. Concerns relative to fire danger typically do not fully appreciate the diversity of stand conditions that exist across the landscape. Variability in fuel loading, composition and moisture greatly impact fire behavior. It is important to remember that areas proposed for evenage management are small, from a landscape perspective (20-30 acres depending on yarding method). As a result, even if a particular stand has a higher fire danger than a surrounding one, the area upon which that stand could impact overall fire hazard is very low. Except for instances where a fire has reached a plume-dominated or wind-driven state, rapid changes in vegetation types can significantly alter fire behavior. For instance, a fire that is moving through the crowns of a mature timber stand can move into a ground fire, when it reaches a plantation where spacing and competing vegetation is managed (as occurs on private timberlands). The variability of vegetation types can alter and moderate fire behavior. What we see in recent catastrophic fires is the combination of extremely dry fuels, aligned with terrain and driven by winds.

The Forest Practice Rules prescribe hazard reduction measures, as described above, and they are intended to reduce the potential for fire starts, and to reduce excess fuel loads generated by Timber Operations. Additionally, the silvicultural prescriptions used in this plan will result in lower tree densities on the landscape, and less vertical continuity between the surface fuels and the tree canopies. No hazard can be reduced to zero, but the combination of the proposed actions within the plan (both silviculture and road maintenance/construction) along with required hazard reduction activities and planning have allowed CAL FIRE to conclude that the plan will not result in a significant adverse effect on Wildfire Risk and Hazard. CAL FIRE has concluded that the plan meets the requirements of the CFPR.

### **Concern #2: Cumulative Visual Impacts analysis**

**The following comments concern the inadequacy of the Cumulative Visual Impacts analysis in the 4-21-00140-CAL, Grindstone Timber Harvest Plan (THP).**

**Grindstone THP consists of 368-acre timber harvest of which 332 acres is alternative prescription harvest. The alternative prescription harvest described is for all intent and purposes clear-cuts, harvested in groupings up to 22 acres in size. Post-harvest stocking for alternative prescription lands consists of even-aged management (i.e., clearcutting followed by replanted plantations) with a 125-point count (i.e., 125 surviving and growing same age trees per acre) within 5-years post-harvest.**

**The Grindstone THP area is located approximately 3 miles northeast of Dorrington in the area surrounding Cottage Springs.**

**The THP is required to, but does not, include an adequate analysis for visual impacts. It simply concludes that, after considering visual resources, there are no impacts (Cumulative Impacts Assessment Overview, page 127). The THP contains zero evidence of any consideration that it complies with California Environmental Quality Act (CEQA).**

- First, the THP does not identify the qualifications of the person preparing the visual impacts review. An independent, qualified person should be included in this review to assess these visual impacts.**

- **Second, the THP fails to include any technical or professional evaluation of impacts. It only falsely states that "there are few if any vantage points within 3 miles where THP operations will be visible to significant numbers of people" (Section 4, E. Visual Resources, page 189). The THP further misstates that "the majority of the THP area is located on canyon terrain with a south facing aspect and geographically is not generally visible to significant numbers of people".**
- **Minimal consideration is given to visual impacts from post-harvest stocking, where even-aged tree plantations will replace a natural looking forest.**

**The harvest area is located along State Highway 4, a National Scenic Highway. State Highway 4, besides being the major road used by local year-round residents, is highly traveled by recreational visitors in the summer months, and the only access to Bear Valley Ski Resort in the winter months.**

**Half the timber tracts identified for harvesting (1587m, 1529m, 3557m, 3370m, 3460m, 3451 m, 3506m, 3351 m, and 3381 m) border State Highway 4 and the remaining tracts are located relatively close to the highway. This THP area is definitely highly visible to all travelers along Highway 4. Furthermore, a good portion of the harvest is adjacent to Cottage Springs, a residential area comprised of permanent residents as well as seasonal homes.**

**The THP is required to, but does not, consider or propose any mitigation measures for visual impacts along this scenic highway. EPFW recommends that, at least, such mitigation must include 200 feet setback from any roads used by the public, areas visible from local homes, and highly used recreational areas.**

**Finally, CEQA requires that different alternatives be considered. Section 3 of the Grindstone THP identifies six different project alternatives that include the project as proposed in the THP, alternate sites, public acquisition of property, no project, etc. However, the THP never considers as an alternative, selective harvest. If it had been considered, it would have retained the look of a natural forest, avoided the use of herbicides, maintained canopy cover similar to the adjacent forests important for slowing snow melt, and minimizing impacts on wildlife while also not creating negative visual impacts.**

**EPFW believes that the Grindstone THP cannot be approved as written and ask that it be denied unless the inadequacies addressed in our letter are properly addressed.**

**In addition to the comments submitted by EPFW, additional comments from Rob Hendrickson and Constance Cook were received. Copies of all comment letters are attached at the end of this document.**

### **Response to Concern #2:**

**All timber harvesting plans must address the potential impacts the project could have on visual resources. Specifically, Technical Rule Addendum #2, Item E specifies the following:**

***E. VISUAL RESOURCES: The visual assessment area is generally the logging area***



*that is readily visible to significant numbers of people who are no further than three miles from the timber operation. To assess visual cumulative effects:*

- 1. Identify any Special Treatment Areas designated as such by the Board because of their visual values.*
- 2. Determine how far the proposed timber operation is from the nearest point that significant numbers of people can view the timber operation. At distances of greater than 3 miles from viewing points activities are not easily discernible and will be less significant.*
- 3. Identify the manner in which the public identified in 1 and 2 above will view the proposed timber operation (from a vehicle on a public road, from a stationary public viewing point or from a pedestrian pathway).*

The Forest Practice Rules under 14 CCR 898 and the Board of Forestry and Fire Protection Technical Rule Addendum number 2 (TRA#2), specifically instruct the Registered Professional Forester to conduct a Cumulative Impacts Assessment. This assessment includes the evaluation of impacts on visual resources. Additionally, evaluating Impacts on visual resources associated with forestry activities is part of the science and practice of forestry. Professional Foresters Law defines Forestry as,

*“Forestry,” as used in this article, refers to the science and practice of managing forested landscapes and the treatment of the forest cover in general, and includes, among other things, the application of scientific knowledge and forestry principles in the fields of fuels management and forest protection, timber growing and utilization, forest inventories, forest economics, forest valuation and finance, and the evaluation and mitigation of Impacts from forestry activities on watershed and scenic values, to achieve the purposes of this article. The practice of forestry applies only to those activities undertaken on forested landscapes. The professions specified in Section 772 are not practicing forestry when mitigating or recommending mitigation of Impacts from previous forestry activities on related watershed or ecological values within their area of professional expertise or when recommending those mitigations for proposed Timber Operations. However, public and private foresters are required to be licensed pursuant to this article when making evaluations and determinations of the appropriate overall combination of mitigations of Impacts from forestry activities necessary to protect all forest resources.*

The evaluation and mitigation of Impacts from forestry activities on watershed and scenic values is described in the definition of Forestry in PRC 753. It is within the scope of a professional forester’s license to evaluate and mitigate impacts on scenic values associated with forestry activities. The Department finds the Registered Professional Forester is the appropriate person to evaluate and mitigate Impacts from forestry activities on visual resources.

During the review process of the THP, the visual resources evaluation and discussion was revised to include additional information and justification. Areas within the visual assessment area where significant numbers of people may be present were individually analyzed. Big Trees Village Subdivision, Dorrington, Camp Connell, Black Springs USFS OHV area, Ganns, USFS Sourgrass Area, and Board Crossing community area have a visual screen from the THP area due to forest cover and topography. Calaveras Big Trees State Park is over 3 miles

from the THP area and is also screened by forest cover and topography. A portion of the THP is adjacent to Cottage Springs. The area adjacent to Cottage Springs will be treated as a fuelbreak. In this area, fuels will be reduced through the reduction of vertical and horizontal fuels by removing brush, suppressed and intermediate trees. Upon completion of the fuelbreak the area within the fuelbreak will still have a forested appearance of spaced dominant and co-dominant trees.

Highway 4, which is designated as a scenic highway bisects the general THP area. There is an approximately 500 feet wide area of federally owned property managed by the USFS located east of Big Trees Village Subdivision to Cottage Springs. This area of federal property is approximately 250 wide on both sides of the highway. As defined in 14 CCR 895.1, a Special Treatment Area for state designated scenic highways is the area within 200 feet of the highway. SPI's ownership and this THP is located outside of the STA for Highway 4. The edge of the even-aged units in this THP are located approximately 250 feet from Highway 4. The units near Highway 4 are buffed by a 250-foot area of mature forest land managed by the USFS. This buffer offers a visual buffer between motorist using Highway 4 and the even-aged harvest units proposed in this THP. Page 189.01 further describes the visual buffer as follows,

*“USFS managed property within the STA and approximately 500-foot-wide federal ownership segment in the THP area and bisected by State Highway 4 is generally characterized by mature, well-timbered forest stands with a preponderance of large dormant and codominant trees. USFS operations in the past 20 years have focused on periodic hazard tree removal and treatment of ground and ladder fuels, primarily with mechanical mastication. As such, the STA and additional area comprising approximately 250-feet of timbered ground on each side of Highway 4 create a significant visual buffer between the highway, SPI property, and Grindstone THP harvest units. Similarly, roadside timber stands and a generally timbered landscape in the Cottage Springs area provide a significant visual buffer between the highway, SPI property, and the Grindstone THP harvest units as well. In addition to the high level of visual screening/filtering of the view from Highway 4, road users in motor vehicles traveling on the state highway in this area at an average estimated speed of 50-55 miles-per-hour have only brief, momentary views of the road side area.”*

Visual impacts are difficult to quantify because there are as many opinions on what a significant impact looks like as there are people. CAL FIRE must exercise professional judgement when reviewing proposed plans and their impact on Visual Resources.

When doing so, CAL FIRE must balance many competing objectives. For example, lands zoned Timber Production Zone by Calaveras County have been designated as lands to be used primary for the production of timber or other compatible uses:

*(g) “Timberland production zone” or “TPZ” means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h). With respect to the general plans of cities and counties, “timberland preserve zone” means “timberland production zone.”*

*(h) “Compatible use” is any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber, and shall include, but not be limited to, any of the*

*following, unless in a specific instance such a use would be contrary to the preceding definition of compatible use:*

- (1) Management for watershed.*
- (2) Management for fish and wildlife habitat or hunting and fishing.*
- (3) A use integrally related to the growing, harvesting and processing of forest products, including but not limited to roads, log landings, and log storage areas.*
- (4) The erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities.*
- (5) Grazing.*
- (6) A residence or other structure necessary for the management of land zoned as timberland production.*

When it comes to timber harvesting, the plan must balance many objectives in deciding how to best meet the landowners objectives while complying with statute and regulations.

**897(a) [In Part]**

*The Timberland Productivity Act restricts use of lands zoned Timberland Production Zone to growing and harvesting timber and compatible uses and establishes a presumption that timber harvesting is expected to and will occur on such lands.*

**4513. Timberlands; creation and maintenance of system of regulation and use; legislative intent.**

*It is the intent of the Legislature to create and maintain an effective and comprehensive system of regulation and use of all Timberlands so as to ensure both of the following:*

- (a) Where feasible, the productivity of Timberlands is restored, enhanced, and maintained.*
- (b) The goal of maximum sustained production of high-quality timber products is achieved while giving consideration to values relating to sequestration of carbon dioxide, recreation, watershed, wildlife, range and forage, fisheries, regional economic vitality, employment, and aesthetic enjoyment.*

**14 CCR §895.1**

**While Giving Consideration** means the selection of those feasible silvicultural systems, operating methods and procedures which substantially lessen significant adverse Impact on the environment and which best achieve long-term, maximum sustained production of forest products, while protecting soil, air, fish and wildlife, and water resources from unreasonable degradation, and which evaluate and make allowance for values relating to range and forage resources, recreation and aesthetics, and regional economic vitality and employment.

Pages 109 to 117 includes a discussion regarding the factors considered in the silvicultural decision. The THP describes why the landowner has decided to use predominately even aged silvicultural methods and why other methods such as uneven aged management were rejected. The visual buffer provided by the federally owned parcel adjacent to Highway 4 already offers a greater area than what is required for a Special Treatment Area for scenic highways per the Forest Practice Rules. Due to the existing forest cover within the approximately 500-foot strip of federally owned land adjacent to Highway 4 and the existing

screening due to topography, there is no reasonably potential significant effect from the proposed THP.

Ultimately, the RPF who writes the plan must consider these and other regulations when deciding on the harvesting methods that will achieve the landowner's goals while meeting the objectives of the Forest Practice Rules and the Forest Practice Act. Likewise, CAL FIRE must consider the range of values that must be evaluated while allowing for legally permitted activities on Timberland. These activities are often a tradeoff between competing and sometimes contradictory objectives. CAL FIRE believes that the plan as approved will not have a significant adverse visual effect.

### **Concern #3: Winter Operations**

During the fall, winter, and early spring periods, soils are often saturated for extensive periods of time. This THP, as proposed, would allow mechanical site preparation, the use of class III watercourse crossings, road construction, and landing construction during winter months under the Winter Period Operation Plan (WPOP) and Ground Conditions. The Ground Conditions in the WPOP restrict operations during the winter period with the requirement that "operations may take place during extended dry periods when roads and . landings are generally firm and easily passable or during hard frozen conditions" (page 34). Our center asserts that it is highly unlikely that field employees doing logging operations will be able to accurately and neutrally judge the true conditions of the soils.

**COMMENT:** We recommend that a neutral party be given the authority to make soil condition determinations that allow winter season operations.

The THP states that roads and landings will be "hydrologically disconnected from watercourses and lakes to the EXTENT FEASIBLE" (page 24). This wording shows that the applicant cannot guarantee that erosion into waterways will not occur, therefore they cannot ensure that water quality will not be adversely impacted. In addition, the inability to actually monitor the effects of winter operation on water quality underscores the need to limit operation to dry months.

As noted in our comments above, it is challenging for a field employee to accurately judge the conditions of the soils under winter conditions, and it is also unlikely that a timber operator would be able to judge whether or not the sediment deposited in streams has increased turbidity to unacceptable levels or whether the sediment visually observed has exceeded water quality standards. This THP would allow mechanical site prep to be conducted during the winter period, "on slopes less than 40% tractors and excavators may be used to mechanically clear brush and slash within the Alternative areas ... mechanical site preparation will not occur on slopes over 40% during the winter period" (page 15). All of this work creates the potential for a significant amount of sediment runoff into downslope streams to occur throughout the project area which has a moderate erosion hazard rating. Class III watercourse crossing may occur during the Winter Period. Temporary tractor road crossings of Class III watercourse may be constructed and used during the winter period if the watercourse is dry.

**It is important for CAL FIRE to ensure that regulatory requirements related to winter conditions are verified by either some measurement standards that can be assessed for accuracy, or that the determination for soil conditions or turbidity in streams be assessed by a third party with neutrality. CSERC respectfully presses for CAL FIRE to avoid approving winter season operations based entirely on unsubstantiated claims by project operators that their operations are not affecting water quality.**

**Road conditions, skid trail conditions, and other areas across the project sites will vary widely in terms of soil saturation due to slope, exposure, etc. Some soils (such as on north or east-facing slopes) may be saturated, while others (drier south-facing slopes) may not be saturated, making it challenging to assess the extent of saturated conditions that are likely to produce significant sediment discharge. Therefore, our Center continues to oppose allowing timber operations during the winter period; but if winter operations are approved, we ask for the following.**

**COMMENT: The Director should require a neutral party to judge road conditions. soil saturations. and to the extent feasible to monitor the turbidity of streams on a regular basis during rain events -- both during operations and following timber operations. This will provide actual data that would potentially reveal whether water quality standards are indeed being met.**

### **Response to Concern #3:**

The Forest Practice Rules allow for an RPF to either utilize a standard Winter Period Operating Plan, or to come up with a prescriptive Winter Period Operating Plan (WPOP) that would provide equal protection to the environment and to the quality and beneficial uses of water. The WPOP prescribes timber operations that will and will not be allowed during the winter period. It is well known that, due to California's Mediterranean climate, many winters can have extended drought periods where rain does not fall for a month or more at a time.

CFPR require that the timber operation will not result in a change to water quality nor the beneficial uses of water. An approved WPOP must follow strict mitigations to avoid impacts to water quality, turbidity standards, basin plans or the beneficial uses of water. All the following rules in this regard are in effect.

- 14 CCR 954.5, Servicing of Logging Equipment, Disposal of Refuse, Litter, Trash and Debris
- 14 CCR 954.6, Waterbreaks
- 14 CCR 954.8, Tractor Road Watercourse Crossing
- 14 CCR 956, Intent of Watercourse and Lake Protection
- 14 CCR 956.2, Protection of the Beneficial Uses of Water and Riparian Functions
- 14 CCR 956.3, General Limitations Near Watercourses, Lakes, Marshes, Meadows and Other Wet Areas
- 14 CCR 956.4, Watercourse and Lake Protection
- 14 CCR 956.7, Reduction of Soil Loss

Ongoing site inspection occurs from CAL FIRE Area Foresters to ensure the correct application of the rules are being followed are year-long. As an example, a quick review of the 4-19-00007-CAL and 4-14-026-CAL, Inspection Reports by the CAL FIRE Area Inspectors revealed the following on a Sierra Pacific Industries THP:

*12/20/2019, 4-19-00007-CAL, CAL FIRE Inspector Whitson: Operations were active in four evenaged units. Fulton Trucking was conducting skidding and loading operations in unit 630 and was falling and preparing to skid and load out of unit 629. Fray Logging was conducting falling, skidding and loading operations in unit 627. Sutton Logging was active in unit 623 where falling, skidding and loading operations were occurring. I walked portions of all active units, and observed ground conditions were ideal for operations.*

*The units were slightly wet on the surface, but dry dirt was present just below the surface. All active operations were being hauled on rocked roads, and no issues were observed though the area was partially covered in snow. SPI Forester Steve Kafka was present on site and we discussed the landowners plan to continue logging off of rocked or paved roads as long as unit conditions allowed. No violations were observed during this inspection*

*1/14/2021, 4-12-026-CAL, CAL FIRE Inspector Whitson: This inspection was initiated by the forester administrating the THP. He wanted to inspect four Class Three Watercourses mapped on the harvest area. Each terminated above Love Creek Road, and he wanted to downgrade them to swales. I inspected all four. Each has an area which is incised, but travels downslope to a gentle grade where the channels dissipate and there is no longer a defined bed and bank. After examining each, I notified the forester I supported downgrading each.*

*During this inspection the LTO and I examined the spur road which had been saturated during the previous visit. The road is drying out, and the LTO does not plan to use the road for several days. After walking the road, I notified the LTO I saw no potential for sediment to access a watercourse. Given this, I felt the LTO could use the road when needed even in the present state.*

While the extensive rules listed above are always in effect, the WPOP contains provisions that are designed to protect the quality and beneficial uses of water. The definition of "saturated soils", and "hard frozen conditions" applies to every area of the plan that is deemed to be operable during the winter months. Just because one area of the project may be sufficiently dry for winter operations, it would not be permissible to declare all areas of the project in acceptable condition given the microclimate, aspect, slope, and elevational differences that are going to be found on a THP area.

The plan also contains soil stabilization measures to treat bare areas within the WLPZ within Item # 18, THP page 22. Specific Winter Operations are discussed in Item #23, THP page 31. The WPOP (found within Item #23) includes several limitations required by the California Forest Practice Act and Rules (CFPR) that are designed to prevent sediment discharge into watercourses. The Department finds that, if followed as prescribed, the provisions in the WPOP plan will protect the quality and beneficial uses of water.

***Significant Sediment Discharge*** means soil erosion that is currently, or, as determined based upon visible physical conditions, may be in the future, discharged to watercourses or lakes in quantities that violate Water Quality Requirements or result in significant individual or cumulative adverse impacts to the beneficial uses of water. One indicator of a Significant Sediment Discharge is a visible increase in turbidity to receiving Class I, II, III, or IV waters.

The use of the phrase "visible increase in turbidity" in the above excerpt from the CFPR was designed by the California Board of Forestry and Fire Protection (BOF) to make it easier for a timber operator or timberland landowner to determine when it is inappropriate to continue with winter operations without needing to involve a neutral party to inspect the work area, or use measuring instrumentation.

As of January 1, 2015, all roads within Timber Harvest Plans must be hydrologically disconnected to the extent feasible. The 2015 Road Rules package contains a set of comprehensive revisions to the construction, reconstruction, maintenance and use of logging roads, and are designed with stringent water quality protections. CAL FIRE finds that the rules along with the measures contained in the WPOP of the THP combined with our ability to enforce these provisions on-site, at our convenience, will mitigate the fact that the plan has WPOP provisions. Protection of the quality and beneficial uses of water is a requirement of the rules of the BOF.

CAL FIRE's observation is that SPI normally does not operate during wet periods in the winter period. In many cases, landowners will operate early in the winter period before the winter rains set in or late in the season when the winter rains end prematurely. Field operations and conditions are routinely inspected and monitored for compliance with all Forest Practice Rules by CAL-FIRE inspectors throughout the life of the THP. This includes evaluating site conditions for timber operations during the winter period.

The Department has not found substantive evidence of probable significant adverse cumulative impacts to beneficial uses of water from its overall review provided in the THP along with documentation from other past projects within the watershed assessment area and in consideration of any information provided in public comments regarding this concern.

#### **Concern #4: Herbicide Use**

**The THP asserts that the actual use of a particular herbicide is not certain for this THP (page 219), however, SPI consistently applies herbicides whenever desirable in site preparation and reforestation treatments. As our Center has communicated in the past, it is misleading and inaccurate for the THP to fail to provide clear mitigation requirements for the application of herbicides since herbicide use for site preparation prior to reforestation is a direct consequence of forest clearing allowed by the THP.**

**COMMENT: CSERC asks that this THP provide accurate and realistic mitigation for the cumulative effects of SPI's widespread use of herbicides that follows logging in the vast majority of THPs approved on its lands within the local region. In particular, widespread herbicide use diminishes broadleaf hardwoods such as dogwoods, alders, maples, and oaks. CSERC asks that this THP provide clear mitigation requiring SPI to**

**avoid small dogwoods, alders, and maples within the project area IF herbicides are applied within five years of the completion of logging within any unit of this THP.**

**Response to Concern #4:**

The U.S. Environmental Protection Agency regulates pesticide use nationwide and has exclusive authority over pesticide labeling. Use of a pesticide is limited to the applications and restrictions on the label, and the label restrictions are legally enforceable. The California Department of Pesticide Regulation (DPR) regulates pesticides within the State of California and has legal authority to adopt restrictions on pesticide use going beyond the regulations of the U.S. Environmental Protection Agency. 7 U.S.C.A. Sec. 136v. DPR operates with extensive authority in the California Food and Agricultural Code and in the California Code of Regulations.

Under California law, pesticide products must be registered by DPR to be sold and used in California. Before a substance is registered as a pesticide for the first time, DPR conducts a thorough evaluation. If DPR determines that further restrictions need to be placed on the use of a pesticide product to mitigate potential adverse effects including human health effects and environmental effects, DPR classifies the pesticide as a restricted pesticide, and individual applications need a permit from the county agricultural commissioner. After a pesticide is registered for use in this state, DPR has an ongoing obligation to review new information received about the pesticide that might show new problems beyond those identified in the registration process. Where the review of new information shows that a significant adverse impact has occurred or is likely to occur, DPR is required to reevaluate the registration.

DPR operates a statewide program of regulating pesticides and is the lead agency for regulating herbicide use under CEQA. DPR has the greatest authority of any state agency for analyzing and regulating herbicide use. Further, DPR acts before any other state or local agency can act because an herbicide product must be registered by DPR before it can be used at all. This lead agency role was confirmed in *City of Sacramento v. State Water Resources Control Board* (3d Dist, 1992) 2 Cal.App.4<sup>th</sup> 960, for DPR's predecessor in regulating pesticides.

DPR's program for regulating pesticides was certified by the Secretary of the Resources Agency as a functional equivalent program under Public Resources Code section 21080.5 in the same manner as CAL FIRE's program of regulating timber harvesting was certified. 14 C.C.R. Sec. 15251(i). Because the program is certified, DPR does not prepare environmental impact reports (EIRs) but prepares other documents in the place of EIRs. P.R.C. sec. 21080.5(d)(3). DPR's registration process takes into consideration that most herbicides will be used statewide. Because the registration evaluation process considers use of an herbicide in a broad area and in a variety of conditions, the documents are the functional equivalent of a program EIR for each pesticide. Site specific application and use of restricted pesticides is evaluated by the county agricultural commissioner during its review of applications for restricted materials permits. Not all pesticides are restricted, and only restricted pesticides require a permit from the county agricultural commissioner, except for a pesticide that DPR has not designated as restricted, the commissioner can require a permit for its use if the commissioner makes a finding that the pesticide will present an undue hazard when used under local conditions.



When posting for public comment its proposed decision to register a new pesticide product and in approving the Public Notice for registration of a pesticide, DPR makes a finding as to whether the pesticide would cause a significant effect on the environment. Because DPR is the CEQA lead agency, this determination is binding on CAL FIRE. P.R.C. sec. 21080.1, 14 C.C.R. 15050. Accordingly, if a DPR-registered herbicide will be used in accordance with the directions and restrictions on the pesticide product label and any other restrictions established by DPR, CAL FIRE is required to find that the use will not have a significant effect on the environment unless there is new information showing significant or potentially significant effects not analyzed by DPR. As a responsible agency, CAL FIRE is barred from repeating the environmental analysis conducted by the lead agency. Because the use of a DPR registered herbicide would not have a significant effect on the environment, CAL FIRE is not required to analyze the use in the THP.

Herbicide use in the general location of a THP may be either a part of the THP or a separate but related activity that is not controlled by the THP. Where the herbicide use is described in the THP as an integral part of the timber operations, CAL FIRE will need to review the herbicide use and its possible environmental effects. CAL FIRE will determine whether the proposed use would be consistent with the label and the registration limitations and whether DPR's lead agency determination of significance will still apply. CAL FIRE will also need to check for significant new information showing changes in circumstances or available information that would require new environmental analysis. Significant new information should be referred to DPR for that department's analysis as part of its ongoing evaluation program. CAL FIRE reviewers should look for simple and practical ways to avoid or mitigate potential new significant effects on the environment. Effects of herbicides proposed as part of the THP would be considered direct effects of the THP.

CAL FIRE believes that where herbicide use is related to the THP but not a part of the THP itself, the environmental effects would be regarded as indirect effects of the THP. The landowners may have ongoing management activities that may occur before a THP is approved, during operation of the THP, and after expiration of the THP when CAL FIRE's inspection authority has lapsed. The use is subject to independent, intervening decisions of the timberland owner, a pest control advisor, and in the case of restricted herbicides, the county agricultural commissioner, and these independent decisions may lead to no herbicide use at all or a use differing from predictions in a THP. CAL FIRE would not know whether in fact the timberland owner would use herbicides at all, which ones the owner may use if any, what restrictions the pest control advisor may recommend, and, in the case of restricted herbicides, what conditions the county agricultural commissioner may impose. Outside of the THP, CAL FIRE has only general information about possibilities. Even if the timberland owner provides herbicide use plans to CAL FIRE with a THP, the use plans may well be changed by the county agricultural commissioner if the timberland owner intends to use a restricted herbicide.

The effects are generally not cumulative impacts because herbicide uses related to different THPs are separated in time and distance so that their individual effects do not reinforce or interact with each other. Use may occur a year or two before a THP begins, then possibly two to five years after operations are complete to reduce competition with small seedlings, or later to release the young trees from competition with brush.

Food and Agricultural Code section 13152(c) requires DPR to maintain a statewide database of wells sampled for pesticide active ingredients. State of California agencies are required to submit results of well sampling to DPR. DPR also conducts well sampling for pesticide residues. To date, the database contains information on 272 individual wells that were sampled and found to have residues of atrazine. DPR investigations of these reports indicate that the residues appear not to be associated with silvicultural activities. DPR has not conducted, nor has it received reports of, systematic investigations of wells used for production of forest products.

The project proponent has proposed use of herbicides in accordance with Federal and State labeling and under the CEQA certified regulatory program administered in California by the Department of Pesticide Regulation (DPR). The County's agricultural commissioner oversees portions of the DPR's functional equivalent program and is designated as a state agency for the purposes of certification (3 CCR 6100(a)(7)). Detailed records are kept on any pesticide application. This information is tracked by DPR and is available to the public.

In addition to the use of herbicides in accordance with Federal and State labeling, the project proponent avoids all required watercourse and wetland buffer areas. The watercourse buffer zones required by the Forest Practice Rules are greater than what is required for label requirements. The project proponent utilizes the buffers which give the most protection, even when the buffers are greater than what is required by the herbicide label.

Prior to commercial application of any herbicides proposed in the plan, SPI must comply with California's DPR process that requires additional site specific analysis. The analysis takes the form of a written recommendation for herbicide use prepared by a licensed Pest Control Advisor (PCA). SPI must use contractors that are supervised by Licensed Qualified Applicators. SPI works with all contractors to ensure applications are conducted in a professional manner that strictly follows all regulatory and licensing requirements.

CAL FIRE has evaluated the potential herbicide use. We have concluded that adherence to State and Federal laws pertaining to certifications and operations will prevent significant effects

#### **Concern #5: Water Drafting**

**Water drafting guidelines Section II Item 38 on page 69 state that "Water shall be drafted at a rate not to exceed 250 gallons per minute".**

**Water drafting is typically required when timber operations occur during the dry summer months for dust abatement. While CSERC supports the efforts to reduce dust levels for public safety and water quality, in dry or drought conditions, any removal of water from low-flowing streams will further stress aquatic species.**

**There is potential suitable habitat for the Sierra Nevada yellow-legged frog (SNYF) and foothill yellow-legged frog (FYLF) as note: "breeding habitat exists along reaches of the North Fork Stanislaus River within the THP Biological Assessment Area (BAA)" (p. 61).**

**As a federally and state endangered species avoiding detrimental effects to their potential suitable habitats is critical.**

**COMMENT: We ask that CAL FIRE direct SPI to follow the same water drafting standards as the Forest Service. BMP 2.5 - relative to logging operations on lands within the Stanislaus Forest.**

**Response to Concern #5:**

BMP 2.5 is required for Federal operations, but CAL FIRE does not have the regulatory authority to require BMP 2.5 on non-federal timberlands.

Water drafting is typically required when timber operations occur during the dry summer months for dust abatement on haul roads. Dust abatement serves many important functions like reducing dust levels to protect the beneficial uses of water by reducing small loose material on the road surface that may runoff into watercourses. Dust abatement is also an important tool for public safety. Several of the haul roads are open to the public and through dust abatement, visibility on the road will be clearer, allowing the public to see traffic associated with the timber operations. Finally, dust abatement protects air quality by reducing particulate matter and dust particles from entering the atmosphere.

The RPF has provided information regarding water drafting activities associated with timber operations on pages 69 and 97. Page 69 states, "the drafting rate shall not reduce the flow of water such that it will cause significant impact to aquatic resources downstream." Also on page 69, "low flowing streams that may be intermittent during operations shall not be used for drafting." Drafting operations are generally precluded during low flow and drought conditions because drafting during these conditions may result in a substantial diversion.

The THP review process is to be used to meet Department of Fish and Game CEQA review requirements. A 1611 addendum is attached at the end of Section II, and supporting information and analysis in Section III.

There is a winter operating plan for this THP which allows for timber operations to occur during the winter during extended dry periods. Typically, water drafting is not required during the winter period because soil moistures levels are higher in the winter compared to the dry summer season.

CAL FIRE has found the plan in compliance with the Forest Practice Rules and Act. Additional protection will be in place through the requirements of Fish and Game Code.

**Concern #6: Raptor Protections**

**There is one known historic Northern Goshawk nest site within the project area. Northern Goshawks are a species of concern and need careful protection around any nest stand.**

**Our Center strongly asserts that pre-operational surveys should be required within and around the proposed harvest area in suitable habitat in order to ensure that any nesting**

**CA Spotted Owl or Northern Goshawk is identified, and that neither Spotted Owls or Goshawks are disturbed.**

**Requiring pre-operational surveys has far higher potential to effectively locate birds prior to disturbance instead of waiting until after operations have started and then expect that raptors can then simply be discovered during timber operations.**

**COMMENT: If pre-treatment surveys for nesting raptors of concern and other nesting birds are not conducted in the treatment area by a qualified biologist. then timber operations should not be allowed to occur during nesting season (between February 15 through September 30) to allow young time to fledge.**

**Response to Concern #6:**

SPI's HCP is part of an application for a Northern and California Spotted Owl incidental take permit that was developed in deliberation with the USFWS, CDFW, and U.S. Forest Service. It describes the anticipated effects of the proposed taking; how those impacts will be minimized or mitigated; and how the HCP is to be funded. Although the CSO is not currently a listed species, conserving species before they are in danger of extinction, or are likely to become so, can also provide early benefits and prevent the need for listing.

On page 173 of the THP, the discussion for Raptors begins. SPI has conducted all the appropriate database searches to determine if known raptors are located within the plan area and within the biological assessment area. The plan elaborates about the protection measures given to listed and non-listed raptors beginning on page 175 of the THP. The THP has protection measures for listed raptors on page 60, Item # 32, and for non-listed raptors on page 63, Item # 32.

On page 63, protection measures for CSO are found and the CSO is discussed in detail beginning on page 182. The THP mentions several historic locations for CSO. Species protection and identification for CSO and other listed and non-listed raptors is discussed in the plan. The THP discusses general survey efforts that will be made for raptor species. There is no provision within the rules of the BOF to provide restoration of habitat for CSO. The species is not currently listed under either the federal or state endangered species acts. The plan contains protections for habitat for any non-listed raptor species, which includes CSO, and these procedures are more than BOF rule requirements. CAL FIRE supports these measures as a preventative way to keep the species from being adversely impacted.

Regarding surveys, on page 75 of the HCP, pre-operational surveys have been conducted since 1990 for CSO, which have been voluntarily accomplished by SPI, and will now be required as part of the HCP.

As described in the PHI attachment, "THP 4-21-00047-TUO (Cobbler) Public Comment and Responses", the Inspector wrote:

Protection measures and survey methods for Northern Goshawk (NOGO), which are the same for listed raptors, are found on page 61. The NGO is discussed in detail beginning on page

175, and indicates no impacts will occur. Protection measures in the plan are in compliance with the Forest Practice Rules.

The Department has determined the plan is in conformance with the rules and significant impacts are not expected.

### **Concern #7: Amphibian Protections**

**As noted in previous comments related to water drafting, Foothill yellow-legged frogs (FYLF) and Sierra Nevada yellow-legged frogs (SNYF) have suitable breeding habitat along the reaches of the North Fork Stanislaus. Even though 2018 surveys did not find FYLF or SNYF, it doesn't provide any assurance that these species are not present in or adjacent to the project area.**

**COMMENT: Our Center strongly asserts that pre-operational surveys should be required within and around the proposed harvest area in suitable habitat in order to ensure that SNYF and FYLF are not disturbed by project operations.**

**If a positive detection occurs for FYLF during surveys or at any time during timber operations, all vegetation and ground disturbing operations should be required to cease within adjacent suitable habitat and a buffer of 40 feet of the observation during the seasonal dry period and within 130 feet during the seasonal wet period. If positive detections occur for SNYF during surveys or at any time during timber operations, all vegetation and ground disturbing operations should be required to cease, and a no operations buffer within 25 meters of the observation and adjacent suitable habitat should be mandated.**

### **Response to Concern #7:**

The THP outlines protection measures for SNYF and FYLF beginning on page 61. A thorough discussion of these species is found beginning on page 162. This includes an assessment of potential SNYF and FYLF breeding and non-breeding habitat and surveys of suitable habitat. Both species discussions conclude either a negative occurrence or are unlikely to have an occurrence. The plan indicates that there are no element recordings or known sightings of SNYF and FYLF within the plan area or BAA except for a questionable sighting in 1953. Additionally, surveys were conducted in 2018 for SNYF and FYLF within the BAA. The surveys did not detect these species. The standard WLPZ protection measures and the protection measures proposed provide sufficient measures to avoid impacts. Should a detection of SNYF or FYLF occur, all vegetation and ground disturbing activities shall cease within 40 feet of the occurrence, and CDFW and CALFIRE shall be consulted to develop site-specific mitigation measures to amend into the THP. CDFW reviewed and evaluated these protection measures during the review process of this THP. The Department has determined the plan is in conformance with the rules and significant impacts to SNYF and FYLF are not expected.

### **Concern #8: Need for Habitat Protection for the Pacific Fisher**

The proposed project, along with nearby past, future, and current projects, significantly and cumulatively reduces forest connectivity (especially of mature conifers) which thus reduces suitable habitat for any fishers that may potentially be present within the project area. The proposed THP assumes that project activity in this region has no detectable effect on sensitive species such as the American Marten and Pacific Fisher.

Unless protocol-consistent surveys are first conducted in the project area, the THP cannot legally base wildlife impact determinations upon the unconfirmed assumption that a rare animal is not present.

**COMMENT:** CSERC urges that either protocol-consistent photo-detection surveys or track plate surveys be required prior to project operations.

Habitat fragmentation is one of the main threats to the fisher according to CDFG's its Status Review of the Fisher (*Martes pennanti*) in California (2010)," the fisher's ability to survive in areas that have had various silvicultural treatments depends on the size, distribution and type of those operations. "Fishers are negatively associated with clearcuts and habitats that are nearly or completely surrounded by clearcuts (Rosenberg and Raphael 1986) (CDFG, 2010)." Throughout this Report, fisher mortality was directly correlated with current timber harvesting practices place is fisher habitat.

Science has shown that fisher mortalities increase in heavily harvested areas due to the reduction of habitat quality (Kelly 1977; Weir and Harstad 1997; Simpson Resource Company 2003). The fisher, especially females, have small home ranges, making them more susceptible to predation in areas with fragmented habitat (Buck et al, 1994:373-374).

It has been well documented that fishers are forest specialists that prefer late seral forests for denning and resting. Late seral forest characteristics such as dense canopy cover, large diameter trees, large snags, large down logs, and understory vegetation of late seral forests for foraging are critical for the fisher survival. Such habitats as described above can be considered the Department's preliminary assessment of essential habitats and habitat elements for the fisher (CDFG).

The fisher is one of several species selected to illustrate conservation issues with the Sierra Nevada and Cascade bioregion. Portions of the account from the 2007 CDFG report are as follows: "... the status of the Pacific fisher is one indicator of the status of forest condition of the Sierra, particularly the old-growth component" (CDFG 2007). On June 15, 2020 the Southern Sierra Nevada DPS of fisher (*Pekania pennanti*) (SSN DPS) was added as an endangered species to the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal Regulations at 50 CFR 17.11 (h).

**Fish and Wildlife Services basis for action:**

The implications for the DPS's status were loss and fragmentation of habitat ... (i.e., loss of snags and other large habitat structures on which the species relies), climate change, and tree mortality from drought, disease, and insect infestations (Fish and Wildlife Services). The Conservation of the Pacific fisher is dependent

**upon the approaches to and success of restoring healthy and diverse forest ecosystems along the Sierra range" (CDFG 2007:301).**

**This THP will continue to exacerbate the loss of fisher habitat and is not responsive to the latest science. Accordingly, as a CEQA equivalent planning assessment, this THP should reasonably mitigate for potential significant impacts that would occur if this THP further reduces suitable fisher habitat by removing large trees, large snags, large down logs, and closed canopy forest conditions.**

**COMMENT: CSERC asks that either SPI be required to undertake furbearer photodetection (or track plate) surveys consistent with scientific protocols within all project units within the plan area prior to any approval of the TOP. or that SPI be required to retain fisher movement corridor areas with a minimum 60% canopy cover that should retain all large snags (16" dbh». large diameter living trees (24" dbh». and all large diameter down logs (20" dbh) along a 200' wide swath across the project units so as to ensure there is suitable habitat for fisher movement -- not just at the present. but into future decades as the tree plantations gradually evolve into young forest stands.**

#### **Response to Concern #8:**

It is noted the area proposed for management under the THP is not currently occupied by the Pacific Fisher.

As noted in the June 10, 2015 Memorandum to Sonke Mastrup, Executive Director of the California Fish and Game Commission (Status Review of Fisher) from the Director of the California Department of Fish and Wildlife on page 25 of the review:

*"Despite a number of extensive surveys using infrared-triggered cameras conducted by the Department, the US Department of Agriculture Forest Service (USFS), private timber companies, and others since the 1950s, no verifiable detections of fishers have been made in that portion of the Sierra Nevada bounded approximately by the North Fork of the Merced River and the North Fork of the Feather River (Zielinski et al. 1995, 2005)."*

In the past, California specific literature and studies have indicated that the Pacific fisher is currently not found from the Cascade and Sierra Nevada Ranges from the Feather River south to the Tuolumne County area. This would mean that there are hundreds of thousands of acres of forested land in California, which includes National Park lands, National Forest lands and wilderness areas, small private landholdings, etc. wherein there has been no finding of Pacific Fisher in recent times. A published CDFW report, "A Status Review of the Pacific Fisher (*Martes pennanti*) in California" from February 2010 states:

*"There is little empirical evidence of fisher inhabiting this gap in the Sierra Nevada range, although the Department believes they did at some level, and we are largely relying on observation data and trapping reports and distribution accounts described by Grinnell et. al (1937). Thus, as much as 43 percent of the historical range is either (1) not inhabited by fisher now; 2) not part of the historical range; or 3) fisher are extremely*

*rare in this area. In this geographical area, there have been a handful of reported observations since the early 1900s. Overall, the Department concludes that there has not been a substantial change in fisher population distribution since the Grinnell period in the early 1920s, and that natural recolonization of fisher to a former range in any detectable number has not occurred".* The CDFW report goes on to report on preliminary genetic coding data that is suggesting that "gap" in fisher distribution may indicate "separation of the northern and southern populations for thousands of years."

It is apparent from the documentation that this absence of fisher in the "gap" is science-based and not related to the number of surveys that have been completed on private industrial forest lands.

The June 10, 2015 Memorandum and status review of the Pacific Fisher is the latest document from CDFW. The Executive Summary discusses the current range and status of the species in references to land ownership below:

*Within the fisher's current range in the state, greater than 50% of the land base is administered by the US Forest Service (USFS) or the National Park Service. Private lands within the NC ESU and the SSN ESU represent about 41% and 10% of the total area, respectively. Comparing the area assumed to be occupied by fishers in the early 1900s to the distribution of contemporary detections of fishers, it appears the range of the fisher has contracted substantially. This difference is due to the apparent absence of fishers from the central Sierra Nevada, most of the northern Sierra Nevada, and portions of the north Coast Ranges. This apparent long-term contraction notwithstanding, the distribution of fishers in California has been stable and possibly increasing in recent years.*

Analysis of terrestrial habitat within the THP also serves to evaluate the potential pre-harvest and post-harvest habitat, although not specific to Pacific fisher. Terrestrial habitats considered include hardwood cover, presence of snags/dens/nest trees, amount of large woody debris, presence of multi-story canopy, road density, presence of late seral characteristics and late seral stage forests. The THP discusses these resources, and has determined that the operations as proposed will not significantly affect assessment area.

Regarding Pacific fisher, CAL FIRE has considered that, because of this harvest, there will continue to be a variety of stand conditions exist within and adjacent to the THP area and will not be significantly changed by the implementation of the THP. Since Pacific fisher is currently not found on or near SPI ownership in the Cascade and Sierra Nevada Ranges from the Feather River to south of the Tuolumne County area, no additional mitigation is required under CESA.

In 2016, SPI entered into a Candidate Conservation Agreement with Assurances (CCAA) for the Pacific Fisher. A CCAA description can be found at the following web location:

<https://www.fws.gov/endangered/esa-library/pdf/CCAs.pdf>

Retention levels described under Item 38 are in part to meet the requirements of the Fisher CCAA.



After careful review of the information provided both in the record and obtained through additional research, CAL FIRE has determined that operations as proposed are not likely to create significant adverse and cumulative impacts to the species listed in the comment letter.

### **Concern #9: Evenaged Regeneration Size**

Section 953.6 states that SPI may use an alternative prescription when, "an alternative regeneration method or intermediate treatment offers a more effective or more feasible way of achieving the objectives of 913 [933,953] than any of the standard silvicultural methods provided in this Article" (120). Therefore, SPI claims that the alternative prescription (AP) harvest is given an exception in this THP because it is the more effective way of giving consideration to regional economic vitality and aesthetic enjoyment. However, the little tree retention maintained in the AP treatments does little to help the poor aesthetic value that these AP areas of evenaged management (i.e., clearcutting followed by replanted plantations) with a 125- point count (i.e., 125 surviving and growing same age trees per acre) within 5-years post-harvest actually provide.

Giving an exception to AP treatments for "aesthetic enjoyment" is misleading and inaccurate. If SPI and CAL FIRE seriously desire to give consideration to regional economic vitality and aesthetic enjoyment, CAL FIRE should require SPI to adopt a THP based on variable retention principles, with stream corridors and patches or strips of wildlife movement/ scenic value habitat left over at least 15% of each evenage unit in order to provide scenic benefits for enhancing tourism for economic vitality and true aesthetic enjoyment.

### **Response to Concern #9:**

During the review process the THP was revised to change the proposed silviculture from an AP closest to clearcutting to standard clearcutting. Pursuant to 14 CCR 953.1(a)(2) the Forest Practice Rules allow the RPF to propose an increase to the even aged acreage limitations where specific conditions are met. Two units were proposed for an increase to the unit size from the standard 20 acres to 21 and 22 acres. Due to the locations of watercourses, roads, and past harvest units, an increase of 1 to 2 acres allows for a more logical logging unit. The increase in even aged unit size to 21 and 22 acres is in conformance with the allowed conditions in 14 CCR 953.1(a)(2). There's no requirement in the rules to retain 15% of each even-aged unit and to mandate such a requirement would conflict with additional considerations in regards to meeting silvicultural objectives such as achieving MSP.

### **Concern #10: Visual impacts**

Our Center provides support of the comments submitted by Ebbetts Pass Forest Watch regarding visual impacts:

The THP is required to, but does not, include an adequate analysis for visual impacts. It simply concludes that after considering visual resources, there are no impacts (Cumulative Impacts Assessment Overview, page 127). The THP contains

**zero evidence of any consideration that it complies with California Environmental Quality Act (CEQA).**

**First the THP does not identify the qualifications of the person preparing the visual impacts review. An independent, qualified person should be included in this review to assess these visual impacts.**

**Second, the THP fails to include any technical or professional evaluation of impacts. It only falsely states that "there are few if any vantage points within 3 miles where THP operations will be visible to significant numbers of people " (Section 4, E. Visual Resources, page 189). The THP further misstates that "the majority of the THP area is located on canyon terrain with a south facing aspect and geographically is not generally visible to significant numbers of people". Minimal consideration is given to visual impacts from post-harvest stocking, where even-aged tree plantations will replace a natural looking forest. The harvest area is located along State Highway 4, a National Scenic Highway. State Highway 4, besides being the major road used by local year-round residents, is highly traveled by recreational visitors in the summer months, and the only access to Bear Valley Ski Resort in the winter months.**

**Half the timber tracts identified for harvesting (1587m, 1529m, 3557m, 3370m, 3460m, 3451m, 3506m, 3351m, and 3381m) border State Highway 4 and the remaining tracts are located relatively close to the highway. This THP area is definitely highly visible to all travelers along Highway 4. Furthermore, a good portion of the harvest is adjacent to Cottage Springs, a residential area comprised of permanent residents as well as seasonal homes.**

**The THP is required to, but does not, consider or propose any mitigation measures for visual impacts along this scenic highway. EPFW recommends that, at least, such mitigation must include 200 feet set back from any roads used by the public, areas visible from local homes, and highly used recreational areas.**

**Finally, CEQA requires that different alternatives be considered. Section 3 of the Grindstone THP identifies six different project alternatives that include the project as proposed in the THP, alternate sites, public acquisition of property, no project, etc. However, the THP never considers as an alternative, selective harvest. It had been considered, it would have retained the look of a natural forest, avoided the use of herbicides, maintained canopy cover similar to the adjacent forests important for slowing snowmelt, and minimizing impacts on wildlife while also not creating negative visual impacts.**

#### **Response to Concern #10:**

See the response for Concern #2.

#### **Concern #11: Significant Cumulative Impacts**

As noted in the first paragraph of these comments, this THP would allow for 332 acres of alternative prescription (evenage logging) similar to clearcut logging treatments. This will continue to cumulatively diminish the number of medium and large conifer trees in the project area and further convert unevenaged biologically diverse forest habitat into uniform, much more simplified and sterile habitat conditions as young tree plantations eventually grow into tree farm crops. The Project area has already been logged multiple times over more than a century and many times in recent years such as the past decade - e.g. 2019 Village THP, 2019 Geazzer, and 2018 Sour Boards. In addition, the Rattlesnake THP is planned to occur in the next 2 years. This area contains primarily second and third growth mixed conifer timber stands. All the previous associated SPI projects have reduced canopy cover and degraded habitat for many wildlife species -- e.g. Pacific fisher, American marten, Northern Goshawk, Northern flying squirrel, and many more.

The Google Earth images below of this THP area and the surrounding area show how a checkerboard of clear-cuts already has **SIGNIFICANTLY** diminished mature forest habitat, created denuded or heavily disturbed watershed conditions, and degraded scenic, watershed, and soil resources. Approval of this THP as is currently proposed will add to the continued cumulative degradation of watershed and forest health.

The Google Earth images below of this THP area and the surrounding area show how a checkerboard of clear-cuts already has **SIGNIFICANTLY** diminished mature forest habitat, created denuded or heavily disturbed watershed conditions, and degraded scenic, watershed, and soil resources. Approval of this THP as is currently proposed will add to the continued cumulative degradation of watershed and forest health.

The Director is legally required to consider the cumulative significant impacts of this THP and the associated impacts from all the adjacent even age treatments to the project area. This THP will not simply result in an isolated negative effect, but it will result in a contributing impact as part of a series of cumulative effects from SPI forest treatments that have taken place and continue to take place throughout the overall forest region overlapping with this specific THP project area.

Project area is surrounded by a patchwork of heavily logged areas.

**COMMENT:** Our center urges the Director to coordinate with CDFW to develop an appropriate mitigation plan to decrease the impacts of this THP combined with past, present, and foreseeable future projects to reduce the potential for negative cumulative effects to below a level of significance.

#### **Response to Concern #11:**

Submitted THPs are reviewed by the Director to determine the potential for significant adverse cumulative impacts. Each plan is reviewed considering past, present and foreseeable future projects, and how these environments have recovered and responded to site-specific mitigations with the application of the CFPR.

Per the CFPR, the Director is required to examine the cumulative impacts of timber harvests and related projects on a watershed assessment area (WAA) of approximately 10,000 acres, along with a biological assessment area designed for the consideration of wildlife. Within the CFPR, Technical Rule Addendum No. 2 establishes the framework for the assessment of cumulative impacts. If impacts are to occur, they will happen on the ground within the WAA and may not be detectable on aerial imagery. That is why it is necessary to examine the area on-the-ground, via a Pre-Harvest Inspection (PHI) with Interagency Review Team representatives, and analyze the findings in the THP.

With respect to the view from Google Earth or other aerial views, this does not reflect the complete consideration when assessing cumulative impacts. CAL FIRE finds that the overhead view from such a distance is unable to discern accurately the amount of regrowth that has occurred, especially where some of the vegetation features such as brush, grass and forbs are small, when compared to neighboring retention overstory trees that show up on the aerial images. It is not especially easy to pick out the detailed features of recovering vegetation, individual or grouped retention trees, or seedling growth from an aerial photo.

CAL FIRE utilizes either Geographic Information Systems (GIS) software, or its publicly available online "Forest Practice Watershed Mapper v2" application. These tools are utilized by Review Team staff to view the proposed operations to get an overview, and to determine if other rules pertaining to forest practices, such as maintaining the adjacency requirements for even-aged units or determining if proposed silviculture are allowed under the CFPR, are being adhered to in plan proposals.

Confirmation of what is found in these tools occurs during on-the-ground inspections, active harvesting inspections, and post-harvest compliance. CAL FIRE relies heavily on observations made on-the-ground from inspectors. Inspectors evaluate the plan and assessment areas during the preharvest inspections of THPs.

In 1999, SPIs option "a" adopted new standards for their even-aged regeneration harvest areas in which 2% minimum islands of trees would be retained in HRAs. The option "a" document demonstrated how the planned harvest will be projected to yield a continuously increasing harvest level over the planning horizon, and would result in increasing tree diameters over time as compared to the first decade starting point. The option "a" plan explained how the projected growth has been constrained by the required protection of "other forest values" such as watershed, scenic, and soil resources. It provided the Department with an analysis of long term sustained yield, as required by the CFPR, and has determined that even-aged management is the silviculture to achieve Maximum Sustained Production of high quality timber products. This management regime does not preclude SPI from ensuring that public trust resources are protected, and the 4-21-00140-CAL THP discloses the potential impacts described in Technical Rule Addendum #2, Cumulative Impacts Assessment Guidelines. CAL FIRE finds that even-age regeneration harvest is consistent with the analysis done in the SPI option "a" sustained yield plan for SPI lands within the Southern Forest District.

CAL FIRE has concluded that the plan meets the requirements of the CFPR and is compliant with SPIs Option "a" plan, while taking into consideration the various public trust resources.

**Concern #12:**

The Central Sierra Environmental Resource Center (CSERC) submits these supplemental comments to CAL FIRE in response to planned changes in the Grindstone THP. The Grindstone THP was originally proposed to allow 43 acres of selection logging, 332 acres of alternative prescription, and 13 acres of fuel break / defensible space. The total project acreage of this THP was defined as 380 acres. Now the project as revised would allow 332 acres of clearcuts, 23 acres of selection logging, 13 acres of fuel break / defensible space. The total project acreage of this THP is now shown as 368 acres, in addition to 127 acres of operational buffer.

The Grindstone THP area is located along the forest corridor of State Highway 4. State Highway 4 is a National Scenic Highway that is a major travel passage used by year-round residents, year-round recreational visitors, and many others. This THP area is highly visible to Highway 4 travelers and to area residents. Many of the clearcut units proposed for logging are located in close proximity to the highway, and even when separated from the highway by the scenic byway strip, the denuded treatment units are still likely to be fully visible to hundreds of thousands of travelers each year who drive the route.

Scenic screening may reduce visibility of units during spring, summer and early fall. Units are especially visible to motorists in the fall and winter period. SPI may argue that the screening already present along the corridor prevents impacts from being seen, however past clearcut units on the other side of the scenic buffer zone have caught the eye of CSERC Staff many times when driving along the highway (see photos below). If CAL FIRE seriously desires to minimize the THP's visual impacts on the region's economic vitality and the scenic values that may otherwise be significantly affected by the project, CAL FIRE should require SPI to adopt a THP that applies variable retention principles along the portions of all units that can be seen from the highway. Such principles would include the retention of trees and associated vegetation along seasonal stream drainages and the retention of patches or strips of existing forest vegetation to provide for wildlife movement/scenic value habitat so that post-treatment retained vegetation would exist over at least 15% of each evenage unit. That mitigation strategy would adequately protect scenic benefits that are so important for tourism and the region's economic vitality.

CSERC fully recognizes SPI's right to manage and operate treatments on the company's private lands in a manner that complies with Forest Practice Rules and with other applicable regulatory requirements. We assert that SPI can achieve THP objectives while also providing reasonable mitigation for the scenic impacts that will occur unless modifications are made to the THP.

Our Center recommends that at least 200 feet of additional vegetative screening be required to buffer SPI's treatments along the scenic byway strip of the main highway corridor. We also recommend a similar buffer of vegetative screening be required through the use of variable retention principles or other means for the THP areas visible from any residences.

The key point emphasized with our comments is that the Director has a responsibility to balance the scenic goals of the National Scenic Highway corridor with the wood production goals of SPI. We believe both goals can be achieved if additional screening and variable retention-type habitat protection is required to be applied to the portions of all evenage units that lie closest to the highway corridor or to any areas of residences.

In addition to raising the concerns described above, our Center also provides support for the local citizen comments being submitted by Ebbetts Pass Forest Watch regarding the impacts of clearcut treatments on their community and the highway corridor.

### Summary

This THP as now proposed would allow for 332 acres of clearcut logging treatments that will continue to diminish mature forest habitat, will affect watershed conditions, will degrade scenic values, and will further convert biologically diverse forest habitat into uniform young tree plantations. While legally allowable under the state's Forest Practice Act, approval of this THP as it is currently proposed will add to the continued cumulative degradation of watershed and forest health values within the overall treatment area. Based on decades of our Center commenting on the ecological effects of such widespread conversion of diverse forest to uniform, sterile tree plantations, we recognize that the Director does not acknowledge any ecological degradation from evenage forest management; and we recognize that no modification of the THP will likely be required based on environmental grounds.

But at the very least, the Director should require meaningful mitigation measures to effectively reduce the potential for significant scenic impacts that will otherwise likely degrade the National Scenic Highway values of the highway corridor.

### Response to Concern #12:

All timber harvesting plans must address the potential impacts the project could have on visual resources. Specifically, Technical Rule Addendum #2, Item E specifies the following:

***E. VISUAL RESOURCES:** The visual assessment area is generally the logging area that is readily visible to significant numbers of people who are no further than three miles from the timber operation. To assess visual cumulative effects:*

- 1. Identify any Special Treatment Areas designated as such by the Board because of their visual values.*
- 2. Determine how far the proposed timber operation is from the nearest point that significant numbers of people can view the timber operation. At distances of greater than 3 miles from viewing points activities are not easily discernible and will be less significant.*
- 3. Identify the manner in which the public identified in 1 and 2 above will view the proposed timber operation (from a vehicle on a public road, from a stationary public viewing point or from a pedestrian pathway).*

The Forest Practice Rules under 14 CCR 898 and the Board of Forestry and Fire Protection Technical Rule Addendum number 2 (TRA#2), specifically instruct the Registered Professional Forester to conduct a Cumulative Impacts Assessment. This assessment includes the evaluation of impacts on visual resources. Additionally, evaluating Impacts on visual resources associated with forestry activities is part of the science and practice of forestry. Professional Foresters Law defines Forestry as,

*“Forestry,” as used in this article, refers to the science and practice of managing forested landscapes and the treatment of the forest cover in general, and includes, among other things, the application of scientific knowledge and forestry principles in the fields of fuels management and forest protection, timber growing and utilization, forest inventories, forest economics, forest valuation and finance, and the evaluation and mitigation of Impacts from forestry activities on watershed and scenic values, to achieve the purposes of this article. The practice of forestry applies only to those activities undertaken on forested landscapes. The professions specified in Section 772 are not practicing forestry when mitigating or recommending mitigation of Impacts from previous forestry activities on related watershed or ecological values within their area of professional expertise or when recommending those mitigations for proposed Timber Operations. However, public and private foresters are required to be licensed pursuant to this article when making evaluations and determinations of the appropriate overall combination of mitigations of Impacts from forestry activities necessary to protect all forest resources.*

The evaluation and mitigation of Impacts from forestry activities on watershed and scenic values is described in the definition of Forestry in PRC 753. It is within the scope of a professional forester's license to evaluate and mitigate impacts on scenic values associated with forestry activities. The Department finds the Registered Professional Forester is the appropriate person to evaluate and mitigate Impacts from forestry activities on visual resources.

During the review process of the THP, the visual resources evaluation and discussion was revised to include additional information and justification. Areas within the visual assessment area where significant numbers of people may be present were individually analyzed. Big Trees Village Subdivision, Dorrington, Camp Connell, Black Springs USFS OHV area, Ganns, USFS Sourgrass Area, and Board Crossing community area have a visual screen from the THP area due to forest cover and topography. Calaveras Big Trees State Park is over 3 miles from the THP area and is also screened by forest cover and topography. A portion of the THP is adjacent to Cottage Springs. The area adjacent to Cottage Springs will be treated as a fuelbreak. In this area, fuels will be reduced through the reduction of vertical and horizontal fuels by removing brush, suppressed and intermediate trees. Upon completion of the fuelbreak the area within the fuelbreak will still have a forested appearance of spaced dominant and co-dominant trees.

Highway 4, which is designated as a scenic highway bisects the general THP area. There is an approximately 500 feet wide area of federally owned property managed by the USFS located east of Big Trees Village Subdivision to Cottage Springs. This area of federal property is approximately 250 wide on both sides of the highway. As defined in 14 CCR 895.1, a Special Treatment Area for state designated scenic highways is the area within 200 feet of the

highway. SPI's ownership and this THP is located outside of the STA for Highway 4. The edge of the even-aged units in this THP are located approximately 250 feet from Highway 4. The units near Highway 4 are buffed by a 250-foot area of mature forest land managed by the USFS. This buffer offers a visual buffer between motorist using Highway 4 and the even-aged harvest units proposed in this THP. Page 189.01 further describes the visual buffer as follows,

*“USFS managed property within the STA and approximately 500-foot-wide federal ownership segment in the THP area and bisected by State Highway 4 is generally characterized by mature, well-timbered forest stands with a preponderance of large dormant and codominant trees. USFS operations in the past 20 years have focused on periodic hazard tree removal and treatment of ground and ladder fuels, primarily with mechanical mastication. As such, the STA and additional area comprising approximately 250-feet of timbered ground on each side of Highway 4 create a significant visual buffer between the highway, SPI property, and Grindstone THP harvest units. Similarly, roadside timber stands and a generally timbered landscape in the Cottage Springs area provide a significant visual buffer between the highway, SPI property, and the Grindstone THP harvest units as well. In addition to the high level of visual screening/filtering of the view from Highway 4, road users in motor vehicles traveling on the state highway in this area at an average estimated speed of 50-55 miles-per-hour have only brief, momentary views of the road side area.”*

Visual impacts are difficult to quantify because there are as many opinions on what a significant impact looks like as there are people. CAL FIRE must exercise professional judgement when reviewing proposed plans and their impact on Visual Resources.

When doing so, CAL FIRE must balance many competing objectives. For example, lands zoned Timber Production Zone by Calaveras County have been designated as lands to be used primary for the production of timber or other compatible uses:

*(g) “Timberland production zone” or “TPZ” means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h).*

*With respect to the general plans of cities and counties, “timberland preserve zone” means “timberland production zone.”*

*(h) “Compatible use” is any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber, and shall include, but not be limited to, any of the following, unless in a specific instance such a use would be contrary to the preceding definition of compatible use:*

*(1) Management for watershed.*

*(2) Management for fish and wildlife habitat or hunting and fishing.*

*(3) A use integrally related to the growing, harvesting and processing of forest products, including but not limited to roads, log landings, and log storage areas.*

*(4) The erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities.*

*(5) Grazing.*

*(6) A residence or other structure necessary for the management of land zoned as timberland production.*



When it comes to timber harvesting, the plan must balance many objectives in deciding how to best meet the landowners objectives while complying with statute and regulations.

**897(a) [In Part]**

*The Timberland Productivity Act restricts use of lands zoned Timberland Production Zone to growing and harvesting timber and compatible uses and establishes a presumption that timber harvesting is expected to and will occur on such lands.*

**4513. Timberlands; creation and maintenance of system of regulation and use; legislative intent.**

*It is the intent of the Legislature to create and maintain an effective and comprehensive system of regulation and use of all Timberlands so as to ensure both of the following:*

*(a) Where feasible, the productivity of Timberlands is restored, enhanced, and maintained.*

*(b) The goal of maximum sustained production of high-quality timber products is achieved while giving consideration to values relating to sequestration of carbon dioxide, recreation, watershed, wildlife, range and forage, fisheries, regional economic vitality, employment, and aesthetic enjoyment.*

**14 CCR §895.1**

**While Giving Consideration** means the selection of those feasible silvicultural systems, operating methods and procedures which substantially lessen significant adverse impact on the environment and which best achieve long-term, maximum sustained production of forest products, while protecting soil, air, fish and wildlife, and water resources from unreasonable degradation, and which evaluate and make allowance for values relating to range and forage resources, recreation and aesthetics, and regional economic vitality and employment.

Pages 109 to 117 includes a discussion regarding the factors considered in the silvicultural decision. The THP describes why the landowner has decided to use predominately even aged silvicultural methods and why other methods such as uneven aged management were rejected. The visual buffer provided by the federally owned parcel adjacent to Highway 4 already offers a greater area than what is required for a Special Treatment Area for scenic highways per the Forest Practice Rules. Due to the existing forest cover within the approximately 500-foot strip of federally owned land adjacent to Highway 4 and the existing screening due to topography, there is no reasonably potential significant effect from the proposed THP.

Ultimately, the RPF who writes the plan must consider these and other regulations when deciding on the harvesting methods that will achieve the landowner's goals while meeting the objectives of the Forest Practice Rules and the Forest Practice Act. Likewise, CAL FIRE must consider the range of values that must be evaluated while allowing for legally permitted activities on Timberland. These activities are often a tradeoff between competing and sometimes contradictory objectives. CAL FIRE believes that the plan as approved will not have a significant adverse visual effect.

**Concern #13:**

We have reviewed Sierra Pacific Industries (SPI) resubmitted changes regarding their Cumulative Visual Impacts analysis in the 4-21-00140-CAL, Grindstone Timber Harvest Plan (THP). Needless to say, we are very disappointed with the THP revisions. The only substantial change we can identify is changing the harvesting method from alternative prescription to an outright clearcut. How does this change improve visual impacts along a National Scenic Byway? Most of our below original visual concerns have been never addressed.

- SPI still has not identified the qualifications of the person preparing the visual impacts review. An independent, qualified person should be included in this review to assess these visual impacts.
- In Section 4, E. Visual Resources, page 189.1 it stated, " ... road users in motor vehicles traveling on the state highway in this area at an average estimated speed of 50-55 mph have only brief, momentary views of the roadside area." In reality, the view the public will be seeing is a USFS managed strip of forest whose understory been mechanically masticated, thereby further opening the view onto clearcut lands. This vision is not what National Scenic Byway designation represents. As well, visual impacts are visual impacts according to the Forest Practice Rules, regardless of how long anyone looks at an individual one. And, although, there may be a speed limit of 55mph through the THP area, driving that fast on that mountain highway is generally unfeasible and unsafe.
- Minimal consideration is given to visual impacts from post-harvest stocking, where even-aged tree plantations will replace a natural looking forest.
- Why was a selective harvest not considered as an alternative? CEQA and NEPA state the purpose and intent of alternatives are to "ensure that the range of alternatives does not foreclose prematurely any option that might protect, restore and enhance the environment."

Again, we remind you, that half the timber tracts identified for harvesting {1587m, 1529m, 3557m, 3370m, 3460m, 3451m, 3506m, 3351m, and 3381m) border State Highway 4 and the remaining tracts are located relatively close to the highway. This THP area is definitely highly visible to all travelers along Highway 4. Furthermore, a good portion of the harvest is adjacent to Cottage Springs, a residential area comprised of permanent residents and as well as seasonal homes.

EPFW believes that the Grindstone THP cannot be approved as this plan will surely degrade the value of our National Scenic Byway designation and we highly recommend that this harvesting method be changed from clearcuts to a selective harvest. A selective harvest would have retained the look of a natural forest. In addition, selective harvests would avoid the use of herbicides, maintain canopy cover similar to the adjacent forests important for slowing snow melt, and minimize impacts on wildlife while also not creating negative visual impacts.

**Response to Concern #13:**

All timber harvesting plans must address the potential impacts the project could have on visual resources. Specifically, Technical Rule Addendum #2, Item E specifies the following:

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(3) A use integrally related to the growing, harvesting and processing of forest products, including but not limited to roads, log landings, and log storage areas.

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When it comes to timber harvesting, the plan must balance many objectives in deciding how to best meet the landowner’s objectives while complying with statute and regulations.

#### **897(a) [In Part]**

*The Timberland Productivity Act restricts use of lands zoned Timberland Production Zone to growing and harvesting timber and compatible uses and establishes a presumption that timber harvesting is expected to and will occur on such lands.*

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**While Giving Consideration** means the selection of those feasible silvicultural systems, operating methods and procedures which substantially lessen significant adverse Impact on the environment and which best achieve long-term, maximum sustained production of forest products, while protecting soil, air, fish and wildlife, and water resources from unreasonable degradation, and which evaluate and make allowance for values relating to range and forage resources, recreation and aesthetics, and regional economic vitality and employment.

Pages 109 to 117 includes a discussion regarding the factors considered in the silvicultural decision. The THP describes why the landowner has decided to use predominately even aged silvicultural methods and why other methods such as uneven aged management were rejected. The visual buffer provided by the federally owned parcel adjacent to Highway 4 already offers a greater area than what is required for a Special Treatment Area for scenic highways per the Forest Practice Rules. Due to the existing forest cover within the approximately 500-foot strip of federally owned land adjacent to Highway 4 and the existing screening due to topography, there is no reasonably potential significant effect from the proposed THP. CEQA requires a description of a range of alternatives to the project which would avoid or substantially lessen any of the significant effects of the project. The proposed will not result in a significant impact to visual resources therefore analyzing additional silvicultural alternatives is not necessary.

Ultimately, the RPF who writes the plan must consider these and other regulations when deciding on the harvesting methods that will achieve the landowner's goals while meeting the objectives of the Forest Practice Rules and the Forest Practice Act. Likewise, CAL FIRE must consider the range of values that must be evaluated while allowing for legally permitted activities on Timberland. These activities are often a tradeoff between competing and sometimes contradictory objectives. CAL FIRE believes that the plan as approved will not have a significant adverse visual effect.

## SUMMARY AND CONCLUSIONS

**The Department recognizes its responsibility** under the Forest Practice Act (FPA) and CEQA to determine whether environmental impacts will be significant and adverse. In the case of the management regime which is part of the THP, significant adverse impacts associated with the proposed application are not anticipated.

**CAL FIRE has reviewed the potential impacts from the harvest and reviewed concerns** from the public and finds that there will be no expected significant adverse environmental impacts from timber harvesting as described in the Official Response above. Mitigation measures contained in the plan and in the Forest Practice Rules adequately address potential significant adverse environmental effects.

**CAL FIRE has considered all pertinent evidence and has determined that no significant** adverse cumulative impacts are likely to result from implementing this THP. Pertinent evidence includes, but is not limited to the assessment done by the plan submitter in the watershed and biological assessment area and the knowledge that CAL FIRE has regarding activities that have occurred in the assessment area and surrounding areas where activities could potentially combine to create a significant cumulative impact. This determination is based on the framework provided by the FPA, CCR's, and additional mitigation measures specific to this THP.

**CAL FIRE has supplemented the information contained in this THP in conformance** with Title 14 CCR § 898, by considering and making known the data and reports which have been submitted from other agencies that reviewed the plan; by considering pertinent information from other timber harvesting documents including THP's, emergency notices, exemption

notices, management plans, etc. and including project review documents from other non-CAL FIRE state, local and federal agencies where appropriate; by considering information from aerial photos and GIS databases and by considering information from the CAL FIRE maintained timber harvesting database; by technical knowledge of unit foresters who have reviewed numerous other timber harvesting operations; by reviewing technical publications and participating in research gathering efforts, and participating in training related to the effects of timber harvesting on forest values; by considering and making available to the RPF who prepares THP's, information submitted by the public.

**CAL FIRE further finds that all pertinent issues and substantial questions raised** by the public and submitted in writing are addressed in this Official Response. Copies of this response are mailed to those who submitted comments in writing with a return address.

**ALL CONCERNS RAISED WERE REVIEWED AND ADDRESSED. ALONG WITH THE FRAMEWORK PROVIDED BY THE FOREST PRACTICE ACT AND THE RULES OF THE BOARD OF FORESTRY, AND THE ADDITION OF THE MITIGATION MEASURES SPECIFIC TO THIS THP, THE DEPARTMENT HAS DETERMINED THAT THERE WILL BE NO SIGNIFICANT ADVERSE IMPACTS RESULTING FROM THE IMPLEMENTATION OF THIS THP.**

**DEPARTMENT OF FORESTRY AND FIRE PROTECTION**

SOUTHERN REGION HEADQUARTERS

1234 East Shaw Avenue  
Fresno, CA 93710-7899  
(559) 243-4100  
Website: [www.fire.ca.gov](http://www.fire.ca.gov)



OFFICIAL RESPONSE OF THE DIRECTOR OF THE CALIFORNIA DEPARTMENT  
OF FORESTRY AND FIRE PROTECTION  
TO SIGNIFICANT ENVIRONMENTAL POINTS RAISED DURING THE  
TIMBER HARVESTING PLAN EVALUATION PROCESS

THP NUMBER: 4-21-00140-CALSUBMITTER: Sierra Pacific IndustriesCOUNTY: Calaveras

END OF PUBLIC COMMENT PERIOD: April 4, 2022

DATE OF OFFICIAL RESPONSE/DATE OF APPROVAL: April 20, 2022

The California Department of Forestry and Fire Protection has prepared the following response to significant environmental points raised during the evaluation of the above-referenced plan. Comments made on like topics were grouped together and addressed in a single response. Where a comment raised a unique topic, a separate response is made. Remarks concerning the validity of the review process for timber operations, questions of law, or topics or concerns so remote or speculative that they could not be reasonably assessed or related to the outcome of a timber operation, have not been addressed.

Sincerely,

Jon Woessner, RPF #2571  
Forester III, Cascade, Sierra & Southern Regions  
Forest Practice Manager

cc: Unit Chief  
RPF, Sierra Pacific Industries, Plan Submitter  
Dept. of Fish & Wildlife, Reg. 4, Water Quality, Reg. 5  
Central Sierra Environmental Resource Center  
Constance Cook  
Rob Hendrickson  
Ebbetts Pass Forest Watch  
Ken Metzger



**COMMON FOREST PRACTICE ABBREVIATIONS**

CAL FIRE	Department of Forestry & Fire Protection	FPR	Forest Practice Rules
CAA	Confidential Archaeological Addendum	LTO	Licensed Timber Operator
CESA	California Endangered Species Act	NMFS	National Marine Fisheries Service
CEQA	California Environmental Quality Act	PHI	Pre-Harvest Inspection
CIA	Cumulative Impacts Assessment	RPF	Registered Professional Forester
CGS	California Geological Survey	THP	Timber Harvest Plan
CSO	California Spotted Owl	USFS	United States Forest Service
DBH	Diameter at Breast Height	WLPZ	Watercourse/Lake Protection Zone
DFG	Department of Fish & Game	WQ	California Regional Water Quality Control Board
DPR	Department of Pesticide Regulation	PCA	Pest Control Advisor
NSO	Northern Spotted Owl	[SIC]	Word used verbatim as originally printed in another document. May indicate a misspelling or uncommon word usage.
CDFW/DFW	California Dept. of Fish & Wildlife		
AB 32	Assembly Bill 32	ARB	Air Resources Board
NPP	Net Primary Production	BOF	Board of Forestry
NEPA	National Environ. Policy Act	CAPCOA	Calif. Air Pollution Control Officers Assoc.
NEP	Net Ecosystem Production	CCR	Calif. Code of Regulations
NTMP	NonIndust. Timb. Manag. Plan	CESA	Calif. Endangered Species Act
OPR	Govm's Office of Plan. & Res.		
Pg	Petagram = 10 <sup>15</sup> grams		
PNW	Pacific NorthWest		
CO <sub>2</sub>	Carbon Dioxide	PRC	Public Resources Code
CO <sub>2</sub> e	Carbon Dioxide equivalent	RPA	Resource Plan. and Assess.
DBH/dbh	Diameter Breast Height	RPF	Registered Professional Forester
DFG	Calif. Department of Fish and Game	SPI	Sierra Pacific Industries
EPA	Environmental Protection Agency	SYP	Sustained Yield Plan
FPA	Forest Practice Act	tC	tonnes of carbon
FPR	Forest Practice Rules	Tg	Teragram = 10 <sup>12</sup> grams
GHG	Greenhouse Gas	THP	Timber Harvesting Plan
ha <sup>-1</sup>	per hectare	LBM	Live Tree Biomass
LTSY	Long Term Sustained Yield	TPZ	Timber Production Zone
m <sup>-2</sup>	per square meter	USFWS	U.S. Fish & Wildlife Service
MAI	Mean Annual Increment	WAA	Watershed Assessment Area
MMBF	Million Board Feet	WLPZ	Watercourse. & Lake Prot. Zone
MMTCO <sub>2</sub> E	Million Metric Tons CO <sub>2</sub> equivalent	yr <sup>-1</sup>	per year

## **NOTIFICATION PROCESS**

In order to notify the public of the proposed timber harvesting, and to ascertain whether there are any concerns with the plan, the following actions are automatically taken on each THP submitted to CAL FIRE:

- Notice of the timber operation is sent to all adjacent landowners if the boundary is within 300 feet of the proposed harvesting, (As per 14 CCR § 1032.7(e))
- Notice of the Plan is submitted to the county clerk for posting with the other environmental notices. (14 CCR § 1032.8(a))
- Notice of the plan is posted at the Department's local office and in Southern-Sierra office in Fresno. (14 CCR § 1032))
- Notice is posted with the Secretary for Resources in Sacramento. (14 CCR § 1032.8(c))
- Notice of the THP is sent to those organizations and individuals on the Department's current list for notification of the plans in the county. (14 CCR § 1032.9(b))
- A notice of the proposed timber operation is posted at a conspicuous location on the public road nearest the plan site. (14 CCR § 1032.7(g))

## **THP REVIEW PROCESS**

The laws and regulations that govern the timber harvesting plan (THP) review process are found in Statute law in the form of the Forest Practice Act which is contained in the Public Resources Code (PRC), and Administrative law in the rules of the Board of Forestry (rules) which are contained in the California Code of Regulations (CCR).

The rules are lengthy in scope and detail and provide explicit instructions for permissible and prohibited actions that govern the conduct of timber operations in the field. The major categories covered by the rules include:

- \*THP contents and the THP review process
- \*Silvicultural methods
- \*Harvesting practices and erosion control
- \*Site preparation
- \*Watercourse and Lake Protection
- \*Hazard Reduction
- \*Fire Protection
- \*Forest insect and disease protection practices
- \*Logging roads and landing

When a THP is submitted to the California Department of Forestry and Fire Protection (CAL FIRE) a multidisciplinary review team conducts the first review team meeting to assess the THP. The review team normally consists of, but is not necessarily limited to, representatives of CAL FIRE, the Department of Fish and Game (DFW), and the Regional

Water Quality Control Board (WQ). The California Geological Survey (CGS) also reviews THP's for indications of potential slope instability. The purpose of the first review team meeting

is to assess the logging plan and determine on a preliminary basis whether it conforms to the rules of the Board of Forestry. Additionally, questions are formulated which are to be answered by a field inspection team.

Next, a preharvest inspection (PHI) is normally conducted to examine the THP area and the logging plan. All review team members may attend, as well as other experts and agency personnel whom CAL FIRE may request. As a result of the PHI, additional recommendations may be formulated to provide greater environmental protection.

After a PHI, a second review team meeting is conducted to examine the field inspection reports and to finalize any additional recommendations or changes in the THP. The review team transmits these recommendations to the RPF, who must respond to each one. The director's representative considers public comment, the adequacy of the registered professional forester's (RPF's) response, and the recommendations of the review team chair before reaching a decision to approve or deny a THP. If a THP is approved, logging may commence. The THP is valid for up to five years, and may be extended under special circumstances for a maximum of 2 years more for a total of 7 years.

Before commencing operations, the plan submitter must notify CAL FIRE. During operations, CAL FIRE periodically inspects the logging area for THP and rule compliance. The number of the inspections will depend upon the plan size, duration, complexity, regeneration method, and the potential for impacts. The contents of the THP and the rules provide the criteria CAL FIRE inspectors use to determine compliance. While CAL FIRE cannot guarantee that a violation will not occur, it is CAL FIRE's policy to pursue vigorously the prompt and positive enforcement of the Forest Practice Act, the forest practice rules, related laws and regulations, and environmental protection measures applying to timber operations on the timberlands of the State. This enforcement policy is directed primarily at preventing and deterring forest practice violations, and secondarily at prompt and appropriate correction of violations when they occur.

The general means of enforcement of the Forest Practice Act, forest practice rules, and the other related regulations range from the use of violation notices which may require corrective actions, to criminal proceedings through the court system. Civil, administrative civil penalty, Timber operator licensing, and RPF licensing actions can also be taken.

THP review and assessment is based on the assumption that there will be no violations that will adversely affect water quality or watershed values significantly. Most forest practice violations are correctable and CAL FIRE's enforcement program seeks to assure correction. Where non-correctable violations occur, civil or criminal action may be taken against the offender. Depending on the outcome of the case and the court in which the case is heard, some sort of supplemental environmental corrective work may be required. This is intended to offset non-correctable adverse impacts. Once a THP is completed, a completion report must be submitted certifying that the area meets the requirements of the rules. CAL FIRE inspects the completed area to verify that all the rules have been followed including erosion control work.

Depending on the silvicultural system used, the stocking standards of the rules must be met immediately or in certain cases within five years. A stocking report must be filed to certify that

the requirements have been met. If the stocking standards have not been met, the area must be planted annually until it is restored. If the landowner fails to restock the land, CAL FIRE may hire a contractor to complete the work and seek recovery of the cost from the landowner.

**The following issues/concerns were raised during the public comment period and are addressed as follows:**

**Concern #1: Wildfire Risk and Hazard**

**My family has owned a cabin in the Dorrington area for the past forty years. The cabin is located approximately five miles down the highway from where the proposed harvesting is to take place. Sections IV, pages 193 -194 of the Grindstone THP (Wildfire Risk and Hazard) describes the THP as being in a very high fire severity hazard zone.**

**In accordance with the Grindstone THP, the project consists of 368-acre timber harvest of which 332 acres is alternative prescription harvest. The alternative prescription harvest described is for all intent and purposes are clearcuts. Given the extensive clearcutting and harvesting operations that have taken place in this area alone in the past 10 to 20 years, there are significant wildfire risks and hazards caused by the proposed project. There are a number of forest fire studies that show clearcut harvesting and subsequent even-age tree plantations leads directly to increase in the intensity and spread of wildfire.**

**A number of recent forest fire studies have shown clearcut harvesting and subsequent even-aged tree plantations lead directly to increase in the intensity and spread of wildfire. Accordingly, we need to protect the "over-story" tree canopy that moderates the "microclimate" of the forest floor. Reduction of the tree canopy which occurs in a clearcut and can occur to a lesser degree in commercial thinning exposes the forest floor to increased sun and wind, causing increased surface temperatures and decreased relative humidity. The temperature increase in turn causes surface fuels to be hotter and drier, resulting in faster rates of fire spread, greater flame lengths and fire line intensities, and more erratic shifts in the speed and direction of fires.**

**The Western Fire Ecology Center states that small-diameter surface fuels (such as even-aged plantations younger than ten years) are the primary carriers of fire. Current fire spread models do not even consider fuels greater than three inches in diameter because it is mainly the fine-sized surface fuels that allows fire spread. Commercial logging operations remove large-diameter fuels which are naturally fire resistant, and replaces them with even-aged plantations with fire-prone small-diameter fuels. Timber plantations are usually comprised of densely-stocked, even-aged stands of young conifers that are extremely flammable and vulnerable to catastrophic fire effects. Consideration should be given to using Selective Harvest rather than Alternative Prescription because of the fire risks associated with the proposed even-aged plantations.**

Satellite mapping of this last month's Caldor Fire show that even with extensive fuel reduction in the burned areas over the last several years, it had minimal effect on slowing the growth and intensity of the fire. In fact, the younger tree plantations may have contributed to the growth of the fire.

In a recent article in the San Francisco Chronicle, it stated "In the wilderness, fire crews couldn't combat the fast-moving flames head-on, instead going in after the fire front moved through to try to save homes and cabins". It is probably time that we starting using our money to home harden communities rather than trying to control wildfires during extreme drought conditions.

### **Response to Concern #1:**

#### **Fire Hazard Risk and Assessment**

*From the appointment of the first State Board of Forestry in 1885, to the creation of the first State Forester position in 1905, and the organization of the original California Division of Forestry in 1927, the Department of Forestry and Fire Protection (CAL FIRE) has protected the people, property, and natural resources of California. The Department's diverse programs work together to plan protection strategies for over 31 million acres of privately-owned wildlands, and to provide emergency services of all kinds throughout California.*

#### ***-CAL FIRE 2019 Strategic Plan***

As an agency, CAL FIRE fulfills many roles to protect both the public and natural resources of our state. When it comes to operations that can impact both the natural environment and the public, CAL FIRE must review these proposals with an eye towards these two responsibilities. When it comes to a decision of whether to approve a plan, CAL FIRE must exercise professional discretion:

#### **14 CCR § 897 Implementation of Act Intent**

**(d)** *Due to the variety of individual circumstances of timber harvesting in California and the subsequent inability to adopt site-specific standards and regulations, these Rules use judgmental terms in describing the standards that will apply in certain situations. By necessity, the RPF shall exercise professional judgment in applying these judgmental terms and in determining which of a range of feasible (see definition 14 CCR 895.1) silvicultural systems, operating methods and procedures contained in the Rules shall be proposed in the plan to substantially lessen significant adverse Impacts in the environment from timber harvesting. The Director also shall exercise professional judgment in applying these judgmental terms in determining whether a particular plan complies with the Rules adopted by the Board and, accordingly, whether he or she should approve or disapprove a plan. The Director shall use these Rules to identify the nature of and the limits to the professional judgment to be exercised by him or her in administering these Rules.*

## Requirements of Evaluation included in the Rules

The Forest Practice Rules recognize that Timber Operations have the potential to cause and contribute to the severity of fires. The need to protect property and natural resources from fire goes back to the founding of the original Board of Forestry in 1885. Fire prevention laws were the first regulations governing forestry in our state.

Current Forest Practice Laws contain significant detail on how operations are to be conducted to reduce or eliminate the chance that logging will cause a fire. Article 7 of the Rules cover the various methods of reducing fire risk and hazard, collectively called "Hazard Reduction":

- 917, 937, 957 Hazard Reduction
  - 917.2, 937.2, 957.2 Treatment of [Logging] Slash to Reduce Fire Hazard
  - 917.3 Prescribed Broadcast Burning of Slash [Coast]
  - 937.3 Prescribed Broadcast Burning of Slash [Northern]
  - 957.3 Prescribed Broadcast Burning of Slash [Southern]
  - 917.4 Treatment of Logging Slash in the Southern Subdistrict
  - 957.4 Treatment of Logging Slash in the High Use Subdistrict
  - 917.5, 937.5, 957.5 Burning of Piles and Concentrations of Slash
  - 917.6, 937.6, 957.6 Notification of Burning
  - 917.7, 937.7, 957.7 Protection of Residual Trees
  - 917.9, 937.9, 957.9 Prevention Practices

A primary concern addressed in the Hazard Reduction Rules deals with logging debris left over after trees are harvested. Branches, leaves, and other materials not taken to a sawmill (called "slash") must be treated in such a way that an increase in fire hazard does not occur, and to prevent the spread of forest-based insects and diseases. For example, the following standard practices shall be followed within the THP area to treat slash:

***917.2, 937.2, 957.2 Treatment of Slash to Reduce Fire Hazard [All Districts]***  
*Except in the [High-Use Subdistrict of the Southern Forest District,] Southern Subdistrict of the Coast Forest District and Coastal Commission Special Treatment Areas of the Coast Forest District, the following standards shall apply to the treatment of Slash created by Timber Operations within the plan area and on roads adjacent to the plan area. Lopping for fire hazard reduction is defined in 14 CCR 895.1.*

- Slash to be treated by piling and burning shall be treated as follows:
  - Piles created prior to September 1 shall be treated not later than April 1 of the year following its creation, or within 30 days following climatic access after April 1 of the year following its creation.
  - Piles created on or after September 1 shall be treated not later than April 1 of the second year following its creation, or within 30 days following climatic access after April 1 of the second year following its creation.
- All woody debris created by Timber Operations greater than one inch but less than eight inches in diameter within 100 feet of permanently located structures maintained for human habitation shall be removed or piled and burned; all Slash

*created between 100-200 feet of permanently located structures maintained for human habitation shall be lopped for fire hazard reduction, removed, chipped or piled and burned*

For this plan, slash treatment will occur within 100 feet of a public road. Also, the area within 200 feet of structures such as in the Cottage Springs area will receive slash treatment. Slash within 100 feet of structure will either be removed or piled and burned. Slash between 100-200 feet of the structure will be lopped, removed, chipped, or piled and burned.

In addition to these regulations for slash treatment, all timber operators are required to have equipment onsite to deal with any fires that start unintentionally. The requirements for the “fire toolbox” are contained in PRC §4428 and are subject to inspection by any CAL FIRE employee.

Furthermore, every Licensed Timber Operator is required to submit to CAL FIRE a Fire Suppression Resource Inventory that contains emergency contact information for each Licensed Timber Operator along with the number of personnel and types of equipment that can be used to suppress any fire. These operators can be called upon to assist CAL FIRE with emergency fire suppression in the area where they are operating, further adding to the resources that can be used during a fire.

In addition to the hazard reduction rules, operations proposed in this plan have additional benefits expected to reduce fire danger.

- Road brushing and maintenance: As part of the Timber Operations, existing roads will receive maintenance to allow for access for logging equipment. These operations ensure that roads used for operations are free of obstruction and can be used during the operations and in the future in the event they are required for fire suppression:

***923.1, 943.1, 963.1 Planning for Logging Roads and Landings. [All Districts]***  
*Logging Roads and Landings shall be planned and located within the context of a systematic layout pattern that considers 14 CCR § 923(b), uses existing Logging Roads and Landings where feasible and appropriate, and provides access for fire and resource protection activities.*

Additionally, any time that burning permits are required (e.g. during the declared fire season), all roads and landings within the harvest plan area must be passable for use during an emergency:

*963.6 (d) When burning permits are required pursuant to PRC § 4423, Logging Roads and Landings that are in use shall be kept in passable condition for fire trucks.*

- New road construction: In addition to the existing roads within the plan area, new seasonal roads are proposed to assist with harvesting. These roads will allow for additional access if necessary for fire suppression.

- Limits on access: New roads within the forest open the potential for unauthorized use by the public, increasing the potential that a fire may occur. The landowner maintains control over access to the plan area using locked gates to discourage trespass.

Maintaining access within the harvest plan area is consistent with the Tuolumne-Calaveras Unit Strategic Fire Plan to allow for rapid extinguishment of fires within CAL FIRE responsibility areas.

When it comes to evaluating the potential for the proposed plan to negatively impact wildfire risk and hazard, the Rules contain the following guidelines:

**Excerpt from Technical Rule Addendum #2:  
WILDFIRE RISK AND HAZARD**

*Cumulative increase in wildfire risk and hazard can occur when the Effects of two or more activities from one or more Projects combine to produce a significant increase in forest fuel loading in the vicinity of residential dwellings and communities.*

*The following elements may be considered in the assessment of potential Cumulative Impacts:*

- 1. Fire hazard severity zoning*
- 2. Existing and probable future fuel conditions including vertical and horizontal continuity of live and dead fuels.*
- 3. Location of known existing public and private Fuelbreaks and fuel hazard reduction activities.*
- 4. Road access for fire suppression resources.*

The Rules specify that an RPF must evaluate potential impacts that could be caused by the project. Timber harvesting is not required to lower wildfire risk and hazard, although this is common from properly designed and implemented operations.

#### Evenage Management and Plantations Impact on Fire Hazard

The total acres proposed for evenage management is 332 acres. Thus, 332 acres of the THP area will be replanted. Item #14 of the plan describes that this area will be planted with enough tree to meet the minimum stocking standard of 125-point count (which would be at least 125 trees per acre).

Comment letters expressed concern with the potential fire risk associated with plantation management. As one would expect, CAL FIRE has concerns about responsible forest management as well as protecting lives and property. If there is a significant increase in risks associated with plantations, CAL FIRE needs to ensure that those risks are mitigated to protect life and property. Not only must we be concerned with protecting the public, but our employees as well which must go into these forested landscapes to fulfill their mission.

All CAL FIRE employees, no matter where they serve, are available to assist with emergency assignments at any time. For example, the CAL FIRE Inspectors for the Tuolumne and Calaveras County area as well as the Tuolumne-Calaveras Unit Forester are also emergency



responders who are often some of the first people to arrive on scene to a fire. They fill a variety of roles as part of an emergency response and understand their duties as foresters can impact the safety of other emergency responders. Proposed harvesting plans are reviewed with both natural resources and public safety in mind.

The public is justified in being concerned about how logging operations can impact fire danger, and it is appropriate that CAL FIRE respond adequately to these concerns. The first concern related to fire hazard is the one posed by tree plantations, and their potential to cause fires to burn hotter and faster.

While there is literature studying the effects that plantations have on fire behavior, a clear cause and effect relationship between plantations and fire danger has not been established. This is primarily because there is a great deal of variability in how plantations are managed. This is especially true with private California timberlands as described below.

CAL FIRE has reviewed many studies on how fires burn within managed and unmanaged landscapes. Often, concerns related to fire behavior and plantations are added as public comment, referring to one of more of these studies. A brief discussion of those studies is provided below for context.

- Wildfire Effects Evaluation Project – Umpqua National Forest (Morrison, Marshall, Minor, & Davis, 2003)
  - *Fire burned most plantation areas with high intensity and spread rapidly through the canopy of these young stands. However, surface-fire intensity was moderated because fuel accumulations on the ground were relatively light. Thus, many plantations experienced moderate-fire severity (high intensity, low heat).*
  - *Fifty-five percent of the plantation areas within the 2002 fire perimeter burned as stand-replacement fires (Appendix A). Plantation mortality is disproportionately high compared to the total area that plantations occupied within the fire perimeter. In fact, mortality in plantations accounted for 41 percent of all mortality on the fires, while the plantation area represented only 22 percent of the total area within the fire perimeter. Younger-age plantations were damaged more than the older plantations and the unmanaged forest (Figure 17: Stand Replacement Mortality in Managed (Regen) and Unmanaged Stands). In fact, 74 percent of plantations 20 years old or less experienced stand replacement mortality. By comparison, mortality was only 40 to 50 percent in stand 21 to 50 years old. (Page 19-20)*
  - *Research in the moderate-severity fire regime of the mixed-evergreen forest of northern California showed a strong relationship of 1987 fire damage in plantations to fire damage levels in adjacent stands (Skinner and Weatherspoon, 1996). Data suggest that fuel treatments within dispersed locations alone may not reduce fire hazard. (Page 20)*

- *Fuel Model 5 best represents the early-seral vegetation including shrub communities and even-aged young plantations. As noted previously, these early-seral stands cover a greater portion of the landscape today than occurred historically. Crown fire spreads readily through these young stands: rates of fire spread can be high, and significant areas of mortality can occur in and adjacent to these stands. (page 25)*

When CAL FIRE reviewed this study, it was noticed that the plantations were classified under fuel (Anderson, 1982). Anderson described these fuels as follows:

*“Fire is generally carried in the surface fuels that are made up of litter cast by the shrubs and the grasses or forbs in the understory. The fires are generally not very intense because surface fuel loads are light, the shrubs are young with little dead material, and the foliage contains little volatile material. Usually shrubs are short and almost totally cover the area. Young, green stands with no dead wood would qualify: laurel, vine maple, alder, or even chaparral, manzanita, or chamise.”*

An examination of representative photos included in the Morrison study showed conifer plantations with a continuous shrub understory. Fuel loading appeared to be high and there was no apparent break in either the vertical or horizontal continuity of fuels. Under these conditions, it is not surprising that young plantations suffered a high degree of mortality. It must be pointed out, in contrast, that plantations on private timberland in California receive a degree of post-harvest cultural treatments (either via mechanical, fire or herbicide treatment) that prevents the level of shrub and fine fuel buildup noted in the Morrison study. As a result of this important difference, CAL FIRE cannot draw a reasonable cause and effect conclusion between the conditions found in the Morrison report and the THP area.

- Southwest Oregon Biscuit Fire: An Analysis of Forest Resources and Fire Severity (Azuma, Donnegan, & Gedney, 2004)

In this study of burn severity following the Biscuit Fire, the Forest Service found that the areas with the highest fire severity were most closely correlated with low site (i.e. Poor growing conditions - Site Class IV, V, and VI), and non-stocked areas (areas that are brush dominated). Table 11., from the report appendix shows that 74% of the non stocked (brush) areas burned with high and moderate severity while 100% of the stands classified as seedling/sapling (<5" DBH) burned with low severity. Results of another study in the same area (Thompson, Spies, & Ganio, 2007) on stands logged and planted after a 1987 fire indicated an increase in fire behavior and mortality in logged stands but noted that these stands had lower conifer densities and more brush than typical plantations. Other studies in the area (Raymond & Peterson, 2005) did not

have a statistically valid sample of stands necessary upon which to validate the accuracy of fire behavior in stands they had previously harvested. From an examination of these studies, a direct causal link between plantations and increased fire danger could not be established.

What was apparent from an examination of the literature was the difference between the plantations evaluated in those studies and those that are managed in California. For the most part, plantation density is managed below densities required to sustain independent crown fire (Peterson, et al., 2009). These stands are also managed during the early successional period to remove or restrict the growth of competing vegetation that can carry fire from the fine fuels into the crowns of the trees.

- Effects of Timber Harvest Following Wildfire in Western North America (Peterson, et al., 2009)

*The forest developing after wildfire or postfire logging may, over time, also constitute a fire hazard because trees can act as part of the understory fuelbed. As crowns emerge from the shrub layer, the low canopy base height creates torching potential (cf. Scott and Reinhardt 2003). If the stand is dense (e.g., 10-cm d.b.h. trees at a density of >1200 per ha), canopy bulk density may be high enough (>0.12 kg/m<sup>3</sup>) to carry independent crown fire under severe fire weather. Canopy base height will eventually increase, reducing torching potential. Fuel dynamics can also be affected by site productivity. For example, in the Olympic Mountains (Washington), fine fuel mass following fire at a productive site (Agee and Huff 1987) was higher than short-term fine fuel mass following fire on drier sites (table 2). In southwestern Oregon, sites burned with high-severity fire had lower fine fuel loads than unburned sites, but on the Olympic site, fuel mass in the first year postfire was twice that of unburned forest primarily owing to branch fall caused by a windstorm during the first postfire winter.*

The fire hazard mentioned in the Scott and Reinhardt study appears to be for plantations where competing vegetation has not been treated, thereby providing a ladder of fuels to carry fire into the crowns. When the hazard is reduced (If the competing vegetation was treated and not present) it stands to reason that the early hazard would be mitigated. The study also says that it would require approximately 485 trees per acre of higher density to carry independent crown fire, under severe fire weather conditions. Most plantations are planted at an initial density lower than this, with the new stocking standards allowing for as little as 125 trees per acre. As will be shown below, this results in a significant reduction in both vertical and horizontal continuity. Also, the number of days where severe fire weather would occur is low, relative to the number of days in a year, further lowering the risk.

- Fire-Silviculture Relationships in Sierra Forests (Weatherspoon, 1996)

Weatherspoon, studying the effects of fire damage on managed and unmanaged stands, noted that plantations were damaged at a higher rate than the unmanaged stands, but also noted the shift in management technique that the forest service had used in the recent past, which took the evaluated stands on a trajectory that differs significantly from those on private timberlands:

***“In recent years, however, concerns over air pollution from burning and adequate retention of soil cover and large woody debris have led managers to forego site preparation and plant through untreated slash on some units. Depending on the site, clearcut units generally have been planted either with ponderosa pine (*Pinus ponderosa* Doug. ex Laws.) or Douglas-fir (*Pseudotsuga menziesii* [Mirb.] Franco) seedlings, or combinations of the two species. Until the early 1980s, plantations routinely were sprayed with herbicides to release conifer seedlings from a wide variety of competing plant species. Since then, restrictions on use of herbicides have led to fewer plantations being released, and those mostly with hand tools. No recorded precommercial thinning was done in plantations affected by the 1987 fires.”***  
[Emphasis added]

In the study area, hazard reduction, site preparation, competing vegetation treatment and precommercial thinning (all common on private forestlands) were not applied. Further in his study, Weatherspoon noted that the increased damage to plantations was more due to the size of the trees and their position in relationship to fine fuels, the primary driver of fire behavior. What Weatherspoon identified as the single biggest indicator of fire danger, as noted above, was the method chosen for site preparation:

***“Site preparation method (as represented by dummy variables) was the only factor related to uniformity of damage, and it was highly significant. Untreated plantations burned quite uniformly (and severely), and differed markedly from treated units in terms of uniformity of damage. Broadcast burned units showed the greatest tendency for fire damage to decrease from the edge of the unit inward- i.e., for the plantation apparently to retard the spread and intensity of the fire. They differed significantly from machine piled units, which tended more towards a spotty burn pattern. No instances were observed in which fire damage increased from the edge of the plantation inward. Further Quantification of results related to uniformity of damage probably is not warranted, given the subjective nature of this variable.”*** [Emphasis Added]

Also noted above was the observed decrease in damage to plantations the further the observation was made from the adjacent stand, suggesting that damage to the plantation was influenced by the fire behavior of the non-evenage stand. This could be because radiant heat damage from the adjacent stand created an increase in crown scorch near the edge of the plantation, but that as the fire moved into the fine fuels of the plantation, intensity and crown scorch decreased. As has been stated above, CAL FIRE could find no direct nexus between evenage management, in and of itself, and an increase in fire danger.

- Reburn severity in managed and unmanaged vegetation in a large wildfire (Thompson, Spies, & Ganio, 2007)

*The Biscuit Fire tended to burn at relatively high severity in young naturally regenerated stands and even more severely in young conifer plantations of comparable age and fire history. This suggests that young forests, whether naturally or artificially regenerated, may be vulnerable to positive feedback cycles of high severity fire, creating more early-successional vegetation and delaying or precluding the return of historical mature-forest composition and structure.*

*It should be noted, however, that many of the plantations examined in this analysis had lower conifer densities and a larger component of shrubs and hardwoods than would be found in typical intensively managed plantations of the same age (11–14 years).*

This is consistent with the findings of the Azuma, Donnegan, & Gedney, 2004 report where it disclosed a disproportionate number of low site acres in the fire area (IV and lower). It was these low site acres that burned the hottest, presumably due to the presence of brush that created a continuous and receptive ladder to carry fire into the tree canopy.

*Reducing connectivity of surface fuels at landscape scales is likely the only way to decrease the size and severity of reburns until vertical diversification and fire resistance is achieved*

The process of breaking up the horizontal and vertical continuity of fuel within plantations is achieved through the control of competing vegetation (e.g. brush) and controlling the density of trees in the plantation (through precommercial or commercial thinning).

- Severe fire weather and intensive forest management increase fire severity in a multi-ownership landscape (Zald & Dunn, 2018)

As with other studies reviewed above, there are myriad differences between California and Oregon forestry practices that must be considered. The primary author of the study (Zald) was contacted on April 8, 2019 to inquire about applicability of this study to areas in California. The author was cautious about applying the study results outside of the geographic region and context of the study. The study itself provides numerous

caveats that must also be considered when determining how applicable the results are to a particular area. For example, the plantations on the O&C lands mentioned in the study are typically managed on a 30-50 year harvest rotation. The harvest rotation ages in the study area are well below those found in California, by as much as half the minimum age for Site 1 timberland. Also, precommercial and commercial thinning is not a common practice in plantations in the Pacific Northwest. California plantations receive both pre-commercial and commercial thinning treatments in addition to other vegetation management treatments (e.g. site preparation, herbicide treatments) that appear to be lacking in the study area. These practices align with the authors descriptions of measures that would reduce fire severity and further differentiate the study area from California forests. For example, the author provides suggestions on measures that would reduce fire severity, one being, “increasing the age (and therefore size) of trees and promoting spatial heterogeneity of stands and fuels is a likely means to reducing fire severity, as are fuel reduction treatments in plantations.” When compared to the study area, California plantations are grown to an older age and receive fuel reduction treatments in the form of precommercial thinning and commercial thinning.

### ***Visual Comparison of Plantation Density***

The differences in management between Oregon and California (and between federal and private lands) cannot be understated. Most of the studies discussed above were from plantations on Federal lands, or on lands in Oregon that were managed much differently in California.



Below is a visual demonstration of the difference in plantation stocking between lands similar to what was described in (Zald & Dunn, 2018) and those that will be planted for this THP. The stands on the left are planted at 400 trees per acre and those on the right are planted at 125 trees per acre. The top picture is the stand at 30 years of age and the bottom is 10 years. Visually you can see the crowns on the left side of the screen are much closer, allowing fire to carry easier from tree to tree.



Figure 1. Top-down view of planting density (400 on the left and 125 on the right). Images on top are the stand at 30 years and the bottom is 10 years of age. Image generated using Visual Stand Designer (<https://visualforester.com/>)

If trees are planted at a lower density, and competing vegetation is controlled to the point where there is little to no horizontal or vertical continuity, the fire danger within the plantation is minimized until the point where the crowns are well above the surface fuels.





Figure 2. Side view of a 10 year old plantation with 400 trees per acre. Image generated using Visual Stand Designer (<https://visualforester.com/>)



Figure 3. Side view of a 30 year old plantation with 400 trees per acre. Image generated using Visual Stand Designer (<https://visualforester.com/>)



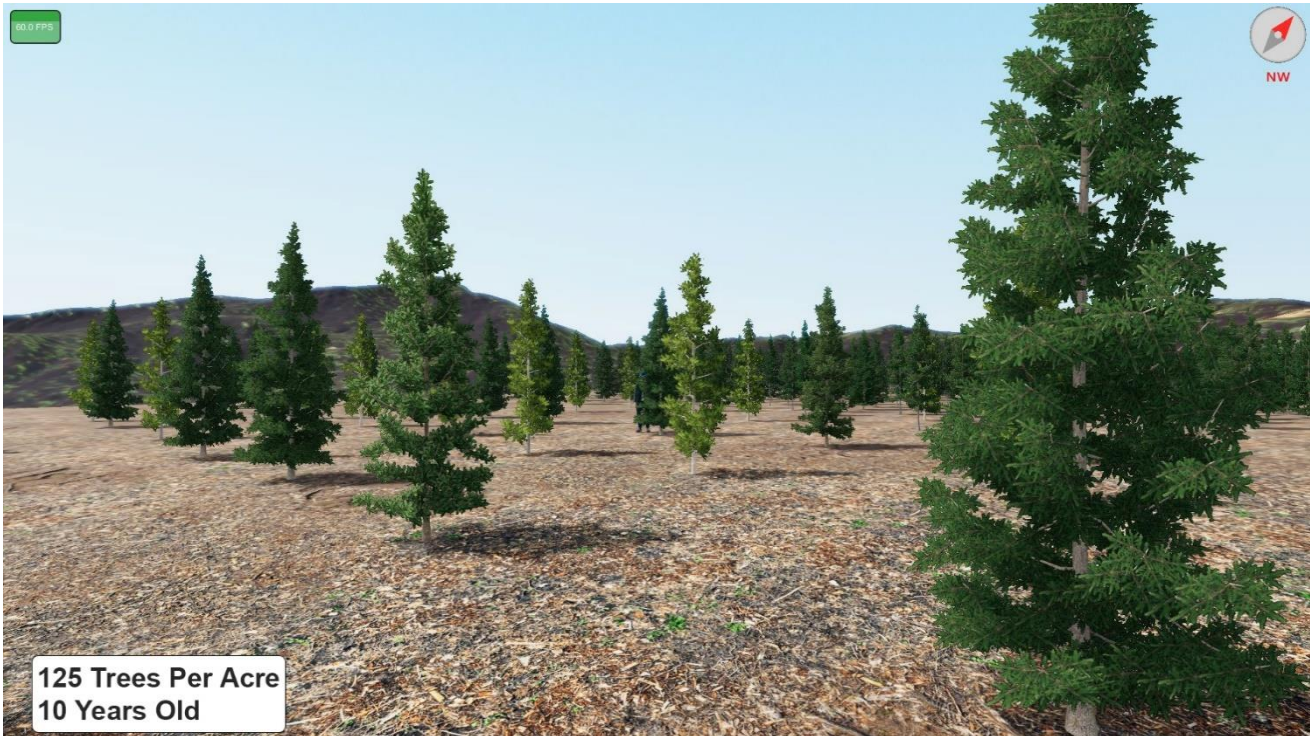


Figure 4. Side view of a 10 year old plantation with 125 trees per acre. Image generated using Visual Stand Designer (<https://visualforester.com/>)



Figure 5. Side view of 30 year old plantation with 125 trees per acre, Image generated using Visual Stand Designer (<https://visualforester.com/>)

Beyond the stand level one must look to the larger landscape to understand the context of individual stands. Concerns relative to fire danger typically do not fully appreciate the diversity of stand conditions that exist across the landscape. Variability in fuel loading, composition and moisture greatly impact fire behavior. It is important to remember that areas proposed for evenage management are small, from a landscape perspective (20-30 acres depending on yarding method). As a result, even if a particular stand has a higher fire danger than a surrounding one, the area upon which that stand could impact overall fire hazard is very low. Except for instances where a fire has reached a plume-dominated or wind-driven state, rapid changes in vegetation types can significantly alter fire behavior. For instance, a fire that is moving through the crowns of a mature timber stand can move into a ground fire, when it reaches a plantation where spacing and competing vegetation is managed (as occurs on private timberlands). The variability of vegetation types can alter and moderate fire behavior. What we see in recent catastrophic fires is the combination of extremely dry fuels, aligned with terrain and driven by winds.

The Forest Practice Rules prescribe hazard reduction measures, as described above, and they are intended to reduce the potential for fire starts, and to reduce excess fuel loads generated by Timber Operations. Additionally, the silvicultural prescriptions used in this plan will result in lower tree densities on the landscape, and less vertical continuity between the surface fuels and the tree canopies. No hazard can be reduced to zero, but the combination of the proposed actions within the plan (both silviculture and road maintenance/construction) along with required hazard reduction activities and planning have allowed CAL FIRE to conclude that the plan will not result in a significant adverse effect on Wildfire Risk and Hazard. CAL FIRE has concluded that the plan meets the requirements of the CFPR.

### **Concern #2: Cumulative Visual Impacts analysis**

**The following comments concern the inadequacy of the Cumulative Visual Impacts analysis in the 4-21-00140-CAL, Grindstone Timber Harvest Plan (THP).**

**Grindstone THP consists of 368-acre timber harvest of which 332 acres is alternative prescription harvest. The alternative prescription harvest described is for all intent and purposes clear-cuts, harvested in groupings up to 22 acres in size. Post-harvest stocking for alternative prescription lands consists of even-aged management (i.e., clearcutting followed by replanted plantations) with a 125-point count (i.e., 125 surviving and growing same age trees per acre) within 5-years post-harvest.**

**The Grindstone THP area is located approximately 3 miles northeast of Dorrington in the area surrounding Cottage Springs.**

**The THP is required to, but does not, include an adequate analysis for visual impacts. It simply concludes that, after considering visual resources, there are no impacts (Cumulative Impacts Assessment Overview, page 127). The THP contains zero evidence of any consideration that it complies with California Environmental Quality Act (CEQA).**

- First, the THP does not identify the qualifications of the person preparing the visual impacts review. An independent, qualified person should be included in this review to assess these visual impacts.**

- **Second, the THP fails to include any technical or professional evaluation of impacts. It only falsely states that "there are few if any vantage points within 3 miles where THP operations will be visible to significant numbers of people" (Section 4, E. Visual Resources, page 189). The THP further misstates that "the majority of the THP area is located on canyon terrain with a south facing aspect and geographically is not generally visible to significant numbers of people".**
- **Minimal consideration is given to visual impacts from post-harvest stocking, where even-aged tree plantations will replace a natural looking forest.**

**The harvest area is located along State Highway 4, a National Scenic Highway. State Highway 4, besides being the major road used by local year-round residents, is highly traveled by recreational visitors in the summer months, and the only access to Bear Valley Ski Resort in the winter months.**

**Half the timber tracts identified for harvesting (1587m, 1529m, 3557m, 3370m, 3460m, 3451 m, 3506m, 3351 m, and 3381 m) border State Highway 4 and the remaining tracts are located relatively close to the highway. This THP area is definitely highly visible to all travelers along Highway 4. Furthermore, a good portion of the harvest is adjacent to Cottage Springs, a residential area comprised of permanent residents as well as seasonal homes.**

**The THP is required to, but does not, consider or propose any mitigation measures for visual impacts along this scenic highway. EPFW recommends that, at least, such mitigation must include 200 feet setback from any roads used by the public, areas visible from local homes, and highly used recreational areas.**

**Finally, CEQA requires that different alternatives be considered. Section 3 of the Grindstone THP identifies six different project alternatives that include the project as proposed in the THP, alternate sites, public acquisition of property, no project, etc. However, the THP never considers as an alternative, selective harvest. If it had been considered, it would have retained the look of a natural forest, avoided the use of herbicides, maintained canopy cover similar to the adjacent forests important for slowing snow melt, and minimizing impacts on wildlife while also not creating negative visual impacts.**

**EPFW believes that the Grindstone THP cannot be approved as written and ask that it be denied unless the inadequacies addressed in our letter are properly addressed.**

**In addition to the comments submitted by EPFW, additional comments from Rob Hendrickson and Constance Cook were received. Copies of all comment letters are attached at the end of this document.**

### **Response to Concern #2:**

**All timber harvesting plans must address the potential impacts the project could have on visual resources. Specifically, Technical Rule Addendum #2, Item E specifies the following:**

***E. VISUAL RESOURCES: The visual assessment area is generally the logging area***



*that is readily visible to significant numbers of people who are no further than three miles from the timber operation. To assess visual cumulative effects:*

- 1. Identify any Special Treatment Areas designated as such by the Board because of their visual values.*
- 2. Determine how far the proposed timber operation is from the nearest point that significant numbers of people can view the timber operation. At distances of greater than 3 miles from viewing points activities are not easily discernible and will be less significant.*
- 3. Identify the manner in which the public identified in 1 and 2 above will view the proposed timber operation (from a vehicle on a public road, from a stationary public viewing point or from a pedestrian pathway).*

The Forest Practice Rules under 14 CCR 898 and the Board of Forestry and Fire Protection Technical Rule Addendum number 2 (TRA#2), specifically instruct the Registered Professional Forester to conduct a Cumulative Impacts Assessment. This assessment includes the evaluation of impacts on visual resources. Additionally, evaluating Impacts on visual resources associated with forestry activities is part of the science and practice of forestry. Professional Foresters Law defines Forestry as,

*“Forestry,” as used in this article, refers to the science and practice of managing forested landscapes and the treatment of the forest cover in general, and includes, among other things, the application of scientific knowledge and forestry principles in the fields of fuels management and forest protection, timber growing and utilization, forest inventories, forest economics, forest valuation and finance, and the evaluation and mitigation of Impacts from forestry activities on watershed and scenic values, to achieve the purposes of this article. The practice of forestry applies only to those activities undertaken on forested landscapes. The professions specified in Section 772 are not practicing forestry when mitigating or recommending mitigation of Impacts from previous forestry activities on related watershed or ecological values within their area of professional expertise or when recommending those mitigations for proposed Timber Operations. However, public and private foresters are required to be licensed pursuant to this article when making evaluations and determinations of the appropriate overall combination of mitigations of Impacts from forestry activities necessary to protect all forest resources.*

The evaluation and mitigation of Impacts from forestry activities on watershed and scenic values is described in the definition of Forestry in PRC 753. It is within the scope of a professional forester’s license to evaluate and mitigate impacts on scenic values associated with forestry activities. The Department finds the Registered Professional Forester is the appropriate person to evaluate and mitigate Impacts from forestry activities on visual resources.

During the review process of the THP, the visual resources evaluation and discussion was revised to include additional information and justification. Areas within the visual assessment area where significant numbers of people may be present were individually analyzed. Big Trees Village Subdivision, Dorrington, Camp Connell, Black Springs USFS OHV area, Ganns, USFS Sourgrass Area, and Board Crossing community area have a visual screen from the THP area due to forest cover and topography. Calaveras Big Trees State Park is over 3 miles

from the THP area and is also screened by forest cover and topography. A portion of the THP is adjacent to Cottage Springs. The area adjacent to Cottage Springs will be treated as a fuelbreak. In this area, fuels will be reduced through the reduction of vertical and horizontal fuels by removing brush, suppressed and intermediate trees. Upon completion of the fuelbreak the area within the fuelbreak will still have a forested appearance of spaced dominant and co-dominant trees.

Highway 4, which is designated as a scenic highway bisects the general THP area. There is an approximately 500 feet wide area of federally owned property managed by the USFS located east of Big Trees Village Subdivision to Cottage Springs. This area of federal property is approximately 250 wide on both sides of the highway. As defined in 14 CCR 895.1, a Special Treatment Area for state designated scenic highways is the area within 200 feet of the highway. SPI's ownership and this THP is located outside of the STA for Highway 4. The edge of the even-aged units in this THP are located approximately 250 feet from Highway 4. The units near Highway 4 are buffed by a 250-foot area of mature forest land managed by the USFS. This buffer offers a visual buffer between motorist using Highway 4 and the even-aged harvest units proposed in this THP. Page 189.01 further describes the visual buffer as follows,

*“USFS managed property within the STA and approximately 500-foot-wide federal ownership segment in the THP area and bisected by State Highway 4 is generally characterized by mature, well-timbered forest stands with a preponderance of large dormant and codominant trees. USFS operations in the past 20 years have focused on periodic hazard tree removal and treatment of ground and ladder fuels, primarily with mechanical mastication. As such, the STA and additional area comprising approximately 250-feet of timbered ground on each side of Highway 4 create a significant visual buffer between the highway, SPI property, and Grindstone THP harvest units. Similarly, roadside timber stands and a generally timbered landscape in the Cottage Springs area provide a significant visual buffer between the highway, SPI property, and the Grindstone THP harvest units as well. In addition to the high level of visual screening/filtering of the view from Highway 4, road users in motor vehicles traveling on the state highway in this area at an average estimated speed of 50-55 miles-per-hour have only brief, momentary views of the road side area.”*

Visual impacts are difficult to quantify because there are as many opinions on what a significant impact looks like as there are people. CAL FIRE must exercise professional judgement when reviewing proposed plans and their impact on Visual Resources.

When doing so, CAL FIRE must balance many competing objectives. For example, lands zoned Timber Production Zone by Calaveras County have been designated as lands to be used primary for the production of timber or other compatible uses:

*(g) “Timberland production zone” or “TPZ” means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h). With respect to the general plans of cities and counties, “timberland preserve zone” means “timberland production zone.”*

*(h) “Compatible use” is any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber, and shall include, but not be limited to, any of the*

*following, unless in a specific instance such a use would be contrary to the preceding definition of compatible use:*

- (1) Management for watershed.*
- (2) Management for fish and wildlife habitat or hunting and fishing.*
- (3) A use integrally related to the growing, harvesting and processing of forest products, including but not limited to roads, log landings, and log storage areas.*
- (4) The erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities.*
- (5) Grazing.*
- (6) A residence or other structure necessary for the management of land zoned as timberland production.*

When it comes to timber harvesting, the plan must balance many objectives in deciding how to best meet the landowners objectives while complying with statute and regulations.

**897(a) [In Part]**

*The Timberland Productivity Act restricts use of lands zoned Timberland Production Zone to growing and harvesting timber and compatible uses and establishes a presumption that timber harvesting is expected to and will occur on such lands.*

**4513. Timberlands; creation and maintenance of system of regulation and use; legislative intent.**

*It is the intent of the Legislature to create and maintain an effective and comprehensive system of regulation and use of all Timberlands so as to ensure both of the following:*

- (a) Where feasible, the productivity of Timberlands is restored, enhanced, and maintained.*
- (b) The goal of maximum sustained production of high-quality timber products is achieved while giving consideration to values relating to sequestration of carbon dioxide, recreation, watershed, wildlife, range and forage, fisheries, regional economic vitality, employment, and aesthetic enjoyment.*

**14 CCR §895.1**

**While Giving Consideration** *means the selection of those feasible silvicultural systems, operating methods and procedures which substantially lessen significant adverse Impact on the environment and which best achieve long-term, maximum sustained production of forest products, while protecting soil, air, fish and wildlife, and water resources from unreasonable degradation, and which evaluate and make allowance for values relating to range and forage resources, recreation and aesthetics, and regional economic vitality and employment.*

Pages 109 to 117 includes a discussion regarding the factors considered in the silvicultural decision. The THP describes why the landowner has decided to use predominately even aged silvicultural methods and why other methods such as uneven aged management were rejected. The visual buffer provided by the federally owned parcel adjacent to Highway 4 already offers a greater area than what is required for a Special Treatment Area for scenic highways per the Forest Practice Rules. Due to the existing forest cover within the approximately 500-foot strip of federally owned land adjacent to Highway 4 and the existing

screening due to topography, there is no reasonably potential significant effect from the proposed THP.

Ultimately, the RPF who writes the plan must consider these and other regulations when deciding on the harvesting methods that will achieve the landowner's goals while meeting the objectives of the Forest Practice Rules and the Forest Practice Act. Likewise, CAL FIRE must consider the range of values that must be evaluated while allowing for legally permitted activities on Timberland. These activities are often a tradeoff between competing and sometimes contradictory objectives. CAL FIRE believes that the plan as approved will not have a significant adverse visual effect.

### **Concern #3: Winter Operations**

During the fall, winter, and early spring periods, soils are often saturated for extensive periods of time. This THP, as proposed, would allow mechanical site preparation, the use of class III watercourse crossings, road construction, and landing construction during winter months under the Winter Period Operation Plan (WPOP) and Ground Conditions. The Ground Conditions in the WPOP restrict operations during the winter period with the requirement that "operations may take place during extended dry periods when roads and . landings are generally firm and easily passable or during hard frozen conditions" (page 34). Our center asserts that it is highly unlikely that field employees doing logging operations will be able to accurately and neutrally judge the true conditions of the soils.

**COMMENT:** We recommend that a neutral party be given the authority to make soil condition determinations that allow winter season operations.

The THP states that roads and landings will be "hydrologically disconnected from watercourses and lakes to the EXTENT FEASIBLE" (page 24). This wording shows that the applicant cannot guarantee that erosion into waterways will not occur, therefore they cannot ensure that water quality will not be adversely impacted. In addition, the inability to actually monitor the effects of winter operation on water quality underscores the need to limit operation to dry months.

As noted in our comments above, it is challenging for a field employee to accurately judge the conditions of the soils under winter conditions, and it is also unlikely that a timber operator would be able to judge whether or not the sediment deposited in streams has increased turbidity to unacceptable levels or whether the sediment visually observed has exceeded water quality standards. This THP would allow mechanical site prep to be conducted during the winter period, "on slopes less than 40% tractors and excavators may be used to mechanically clear brush and slash within the Alternative areas ... mechanical site preparation will not occur on slopes over 40% during the winter period" (page 15). All of this work creates the potential for a significant amount of sediment runoff into downslope streams to occur throughout the project area which has a moderate erosion hazard rating. Class III watercourse crossing may occur during the Winter Period. Temporary tractor road crossings of Class III watercourse may be constructed and used during the winter period if the watercourse is dry.



**It is important for CAL FIRE to ensure that regulatory requirements related to winter conditions are verified by either some measurement standards that can be assessed for accuracy, or that the determination for soil conditions or turbidity in streams be assessed by a third party with neutrality. CSERC respectfully presses for CAL FIRE to avoid approving winter season operations based entirely on unsubstantiated claims by project operators that their operations are not affecting water quality.**

**Road conditions, skid trail conditions, and other areas across the project sites will vary widely in terms of soil saturation due to slope, exposure, etc. Some soils (such as on north or east-facing slopes) may be saturated, while others (drier south-facing slopes) may not be saturated, making it challenging to assess the extent of saturated conditions that are likely to produce significant sediment discharge. Therefore, our Center continues to oppose allowing timber operations during the winter period; but if winter operations are approved, we ask for the following.**

**COMMENT: The Director should require a neutral party to judge road conditions. soil saturations. and to the extent feasible to monitor the turbidity of streams on a regular basis during rain events -- both during operations and following timber operations. This will provide actual data that would potentially reveal whether water quality standards are indeed being met.**

### **Response to Concern #3:**

The Forest Practice Rules allow for an RPF to either utilize a standard Winter Period Operating Plan, or to come up with a prescriptive Winter Period Operating Plan (WPOP) that would provide equal protection to the environment and to the quality and beneficial uses of water. The WPOP prescribes timber operations that will and will not be allowed during the winter period. It is well known that, due to California's Mediterranean climate, many winters can have extended drought periods where rain does not fall for a month or more at a time.

CFPR require that the timber operation will not result in a change to water quality nor the beneficial uses of water. An approved WPOP must follow strict mitigations to avoid impacts to water quality, turbidity standards, basin plans or the beneficial uses of water. All the following rules in this regard are in effect.

- 14 CCR 954.5, Servicing of Logging Equipment, Disposal of Refuse, Litter, Trash and Debris
- 14 CCR 954.6, Waterbreaks
- 14 CCR 954.8, Tractor Road Watercourse Crossing
- 14 CCR 956, Intent of Watercourse and Lake Protection
- 14 CCR 956.2, Protection of the Beneficial Uses of Water and Riparian Functions
- 14 CCR 956.3, General Limitations Near Watercourses, Lakes, Marshes, Meadows and Other Wet Areas
- 14 CCR 956.4, Watercourse and Lake Protection
- 14 CCR 956.7, Reduction of Soil Loss

Ongoing site inspection occurs from CAL FIRE Area Foresters to ensure the correct application of the rules are being followed are year-long. As an example, a quick review of the 4-19-00007-CAL and 4-14-026-CAL, Inspection Reports by the CAL FIRE Area Inspectors revealed the following on a Sierra Pacific Industries THP:

*12/20/2019, 4-19-00007-CAL, CAL FIRE Inspector Whitson: Operations were active in four evenaged units. Fulton Trucking was conducting skidding and loading operations in unit 630 and was falling and preparing to skid and load out of unit 629. Fray Logging was conducting falling, skidding and loading operations in unit 627. Sutton Logging was active in unit 623 where falling, skidding and loading operations were occurring. I walked portions of all active units, and observed ground conditions were ideal for operations.*

*The units were slightly wet on the surface, but dry dirt was present just below the surface. All active operations were being hauled on rocked roads, and no issues were observed though the area was partially covered in snow. SPI Forester Steve Kafka was present on site and we discussed the landowners plan to continue logging off of rocked or paved roads as long as unit conditions allowed. No violations were observed during this inspection*

*1/14/2021, 4-12-026-CAL, CAL FIRE Inspector Whitson: This inspection was initiated by the forester administrating the THP. He wanted to inspect four Class Three Watercourses mapped on the harvest area. Each terminated above Love Creek Road, and he wanted to downgrade them to swales. I inspected all four. Each has an area which is incised, but travels downslope to a gentle grade where the channels dissipate and there is no longer a defined bed and bank. After examining each, I notified the forester I supported downgrading each.*

*During this inspection the LTO and I examined the spur road which had been saturated during the previous visit. The road is drying out, and the LTO does not plan to use the road for several days. After walking the road, I notified the LTO I saw no potential for sediment to access a watercourse. Given this, I felt the LTO could use the road when needed even in the present state.*

While the extensive rules listed above are always in effect, the WPOP contains provisions that are designed to protect the quality and beneficial uses of water. The definition of "saturated soils", and "hard frozen conditions" applies to every area of the plan that is deemed to be operable during the winter months. Just because one area of the project may be sufficiently dry for winter operations, it would not be permissible to declare all areas of the project in acceptable condition given the microclimate, aspect, slope, and elevational differences that are going to be found on a THP area.

The plan also contains soil stabilization measures to treat bare areas within the WLPZ within Item # 18, THP page 22. Specific Winter Operations are discussed in Item #23, THP page 31. The WPOP (found within Item #23) includes several limitations required by the California Forest Practice Act and Rules (CFPR) that are designed to prevent sediment discharge into watercourses. The Department finds that, if followed as prescribed, the provisions in the WPOP plan will protect the quality and beneficial uses of water.

***Significant Sediment Discharge*** means soil erosion that is currently, or, as determined based upon visible physical conditions, may be in the future, discharged to watercourses or lakes in quantities that violate Water Quality Requirements or result in significant individual or cumulative adverse impacts to the beneficial uses of water. One indicator of a Significant Sediment Discharge is a visible increase in turbidity to receiving Class I, II, III, or IV waters.

The use of the phrase "visible increase in turbidity" in the above excerpt from the CFPR was designed by the California Board of Forestry and Fire Protection (BOF) to make it easier for a timber operator or timberland landowner to determine when it is inappropriate to continue with winter operations without needing to involve a neutral party to inspect the work area, or use measuring instrumentation.

As of January 1, 2015, all roads within Timber Harvest Plans must be hydrologically disconnected to the extent feasible. The 2015 Road Rules package contains a set of comprehensive revisions to the construction, reconstruction, maintenance and use of logging roads, and are designed with stringent water quality protections. CAL FIRE finds that the rules along with the measures contained in the WPOP of the THP combined with our ability to enforce these provisions on-site, at our convenience, will mitigate the fact that the plan has WPOP provisions. Protection of the quality and beneficial uses of water is a requirement of the rules of the BOF.

CAL FIRE's observation is that SPI normally does not operate during wet periods in the winter period. In many cases, landowners will operate early in the winter period before the winter rains set in or late in the season when the winter rains end prematurely. Field operations and conditions are routinely inspected and monitored for compliance with all Forest Practice Rules by CAL-FIRE inspectors throughout the life of the THP. This includes evaluating site conditions for timber operations during the winter period.

The Department has not found substantive evidence of probable significant adverse cumulative impacts to beneficial uses of water from its overall review provided in the THP along with documentation from other past projects within the watershed assessment area and in consideration of any information provided in public comments regarding this concern.

#### **Concern #4: Herbicide Use**

**The THP asserts that the actual use of a particular herbicide is not certain for this THP (page 219), however, SPI consistently applies herbicides whenever desirable in site preparation and reforestation treatments. As our Center has communicated in the past, it is misleading and inaccurate for the THP to fail to provide clear mitigation requirements for the application of herbicides since herbicide use for site preparation prior to reforestation is a direct consequence of forest clearing allowed by the THP.**

**COMMENT: CSERC asks that this THP provide accurate and realistic mitigation for the cumulative effects of SPI's widespread use of herbicides that follows logging in the vast majority of THPs approved on its lands within the local region. In particular, widespread herbicide use diminishes broadleaf hardwoods such as dogwoods, alders, maples, and oaks. CSERC asks that this THP provide clear mitigation requiring SPI to**

**avoid small dogwoods, alders, and maples within the project area IF herbicides are applied within five years of the completion of logging within any unit of this THP.**

**Response to Concern #4:**

The U.S. Environmental Protection Agency regulates pesticide use nationwide and has exclusive authority over pesticide labeling. Use of a pesticide is limited to the applications and restrictions on the label, and the label restrictions are legally enforceable. The California Department of Pesticide Regulation (DPR) regulates pesticides within the State of California and has legal authority to adopt restrictions on pesticide use going beyond the regulations of the U.S. Environmental Protection Agency. 7 U.S.C.A. Sec. 136v. DPR operates with extensive authority in the California Food and Agricultural Code and in the California Code of Regulations.

Under California law, pesticide products must be registered by DPR to be sold and used in California. Before a substance is registered as a pesticide for the first time, DPR conducts a thorough evaluation. If DPR determines that further restrictions need to be placed on the use of a pesticide product to mitigate potential adverse effects including human health effects and environmental effects, DPR classifies the pesticide as a restricted pesticide, and individual applications need a permit from the county agricultural commissioner. After a pesticide is registered for use in this state, DPR has an ongoing obligation to review new information received about the pesticide that might show new problems beyond those identified in the registration process. Where the review of new information shows that a significant adverse impact has occurred or is likely to occur, DPR is required to reevaluate the registration.

DPR operates a statewide program of regulating pesticides and is the lead agency for regulating herbicide use under CEQA. DPR has the greatest authority of any state agency for analyzing and regulating herbicide use. Further, DPR acts before any other state or local agency can act because an herbicide product must be registered by DPR before it can be used at all. This lead agency role was confirmed in *City of Sacramento v. State Water Resources Control Board* (3d Dist, 1992) 2 Cal.App.4<sup>th</sup> 960, for DPR's predecessor in regulating pesticides.

DPR's program for regulating pesticides was certified by the Secretary of the Resources Agency as a functional equivalent program under Public Resources Code section 21080.5 in the same manner as CAL FIRE's program of regulating timber harvesting was certified. 14 C.C.R. Sec. 15251(i). Because the program is certified, DPR does not prepare environmental impact reports (EIRs) but prepares other documents in the place of EIRs. P.R.C. sec. 21080.5(d)(3). DPR's registration process takes into consideration that most herbicides will be used statewide. Because the registration evaluation process considers use of an herbicide in a broad area and in a variety of conditions, the documents are the functional equivalent of a program EIR for each pesticide. Site specific application and use of restricted pesticides is evaluated by the county agricultural commissioner during its review of applications for restricted materials permits. Not all pesticides are restricted, and only restricted pesticides require a permit from the county agricultural commissioner, except for a pesticide that DPR has not designated as restricted, the commissioner can require a permit for its use if the commissioner makes a finding that the pesticide will present an undue hazard when used under local conditions.

When posting for public comment its proposed decision to register a new pesticide product and in approving the Public Notice for registration of a pesticide, DPR makes a finding as to whether the pesticide would cause a significant effect on the environment. Because DPR is the CEQA lead agency, this determination is binding on CAL FIRE. P.R.C. sec. 21080.1, 14 C.C.R. 15050. Accordingly, if a DPR-registered herbicide will be used in accordance with the directions and restrictions on the pesticide product label and any other restrictions established by DPR, CAL FIRE is required to find that the use will not have a significant effect on the environment unless there is new information showing significant or potentially significant effects not analyzed by DPR. As a responsible agency, CAL FIRE is barred from repeating the environmental analysis conducted by the lead agency. Because the use of a DPR registered herbicide would not have a significant effect on the environment, CAL FIRE is not required to analyze the use in the THP.

Herbicide use in the general location of a THP may be either a part of the THP or a separate but related activity that is not controlled by the THP. Where the herbicide use is described in the THP as an integral part of the timber operations, CAL FIRE will need to review the herbicide use and its possible environmental effects. CAL FIRE will determine whether the proposed use would be consistent with the label and the registration limitations and whether DPR's lead agency determination of significance will still apply. CAL FIRE will also need to check for significant new information showing changes in circumstances or available information that would require new environmental analysis. Significant new information should be referred to DPR for that department's analysis as part of its ongoing evaluation program. CAL FIRE reviewers should look for simple and practical ways to avoid or mitigate potential new significant effects on the environment. Effects of herbicides proposed as part of the THP would be considered direct effects of the THP.

CAL FIRE believes that where herbicide use is related to the THP but not a part of the THP itself, the environmental effects would be regarded as indirect effects of the THP. The landowners may have ongoing management activities that may occur before a THP is approved, during operation of the THP, and after expiration of the THP when CAL FIRE's inspection authority has lapsed. The use is subject to independent, intervening decisions of the timberland owner, a pest control advisor, and in the case of restricted herbicides, the county agricultural commissioner, and these independent decisions may lead to no herbicide use at all or a use differing from predictions in a THP. CAL FIRE would not know whether in fact the timberland owner would use herbicides at all, which ones the owner may use if any, what restrictions the pest control advisor may recommend, and, in the case of restricted herbicides, what conditions the county agricultural commissioner may impose. Outside of the THP, CAL FIRE has only general information about possibilities. Even if the timberland owner provides herbicide use plans to CAL FIRE with a THP, the use plans may well be changed by the county agricultural commissioner if the timberland owner intends to use a restricted herbicide.

The effects are generally not cumulative impacts because herbicide uses related to different THPs are separated in time and distance so that their individual effects do not reinforce or interact with each other. Use may occur a year or two before a THP begins, then possibly two to five years after operations are complete to reduce competition with small seedlings, or later to release the young trees from competition with brush.

Food and Agricultural Code section 13152(c) requires DPR to maintain a statewide database of wells sampled for pesticide active ingredients. State of California agencies are required to submit results of well sampling to DPR. DPR also conducts well sampling for pesticide residues. To date, the database contains information on 272 individual wells that were sampled and found to have residues of atrazine. DPR investigations of these reports indicate that the residues appear not to be associated with silvicultural activities. DPR has not conducted, nor has it received reports of, systematic investigations of wells used for production of forest products.

The project proponent has proposed use of herbicides in accordance with Federal and State labeling and under the CEQA certified regulatory program administered in California by the Department of Pesticide Regulation (DPR). The County's agricultural commissioner oversees portions of the DPR's functional equivalent program and is designated as a state agency for the purposes of certification (3 CCR 6100(a)(7)). Detailed records are kept on any pesticide application. This information is tracked by DPR and is available to the public.

In addition to the use of herbicides in accordance with Federal and State labeling, the project proponent avoids all required watercourse and wetland buffer areas. The watercourse buffer zones required by the Forest Practice Rules are greater than what is required for label requirements. The project proponent utilizes the buffers which give the most protection, even when the buffers are greater than what is required by the herbicide label.

Prior to commercial application of any herbicides proposed in the plan, SPI must comply with California's DPR process that requires additional site specific analysis. The analysis takes the form of a written recommendation for herbicide use prepared by a licensed Pest Control Advisor (PCA). SPI must use contractors that are supervised by Licensed Qualified Applicators. SPI works with all contractors to ensure applications are conducted in a professional manner that strictly follows all regulatory and licensing requirements.

CAL FIRE has evaluated the potential herbicide use. We have concluded that adherence to State and Federal laws pertaining to certifications and operations will prevent significant effects

#### **Concern #5: Water Drafting**

**Water drafting guidelines Section II Item 38 on page 69 state that "Water shall be drafted at a rate not to exceed 250 gallons per minute".**

**Water drafting is typically required when timber operations occur during the dry summer months for dust abatement. While CSERC supports the efforts to reduce dust levels for public safety and water quality, in dry or drought conditions, any removal of water from low-flowing streams will further stress aquatic species.**

**There is potential suitable habitat for the Sierra Nevada yellow-legged frog (SNYF) and foothill yellow-legged frog (FYLF) as note: "breeding habitat exists along reaches of the North Fork Stanislaus River within the THP Biological Assessment Area (BAA)" (p. 61).**

**As a federally and state endangered species avoiding detrimental effects to their potential suitable habitats is critical.**

**COMMENT: We ask that CAL FIRE direct SPI to follow the same water drafting standards as the Forest Service. BMP 2.5 - relative to logging operations on lands within the Stanislaus Forest.**

**Response to Concern #5:**

BMP 2.5 is required for Federal operations, but CAL FIRE does not have the regulatory authority to require BMP 2.5 on non-federal timberlands.

Water drafting is typically required when timber operations occur during the dry summer months for dust abatement on haul roads. Dust abatement serves many important functions like reducing dust levels to protect the beneficial uses of water by reducing small loose material on the road surface that may runoff into watercourses. Dust abatement is also an important tool for public safety. Several of the haul roads are open to the public and through dust abatement, visibility on the road will be clearer, allowing the public to see traffic associated with the timber operations. Finally, dust abatement protects air quality by reducing particulate matter and dust particles from entering the atmosphere.

The RPF has provided information regarding water drafting activities associated with timber operations on pages 69 and 97. Page 69 states, "the drafting rate shall not reduce the flow of water such that it will cause significant impact to aquatic resources downstream." Also on page 69, "low flowing streams that may be intermittent during operations shall not be used for drafting." Drafting operations are generally precluded during low flow and drought conditions because drafting during these conditions may result in a substantial diversion.

The THP review process is to be used to meet Department of Fish and Game CEQA review requirements. A 1611 addendum is attached at the end of Section II, and supporting information and analysis in Section III.

There is a winter operating plan for this THP which allows for timber operations to occur during the winter during extended dry periods. Typically, water drafting is not required during the winter period because soil moistures levels are higher in the winter compared to the dry summer season.

CAL FIRE has found the plan in compliance with the Forest Practice Rules and Act. Additional protection will be in place through the requirements of Fish and Game Code.

**Concern #6: Raptor Protections**

**There is one known historic Northern Goshawk nest site within the project area. Northern Goshawks are a species of concern and need careful protection around any nest stand.**

**Our Center strongly asserts that pre-operational surveys should be required within and around the proposed harvest area in suitable habitat in order to ensure that any nesting**

**CA Spotted Owl or Northern Goshawk is identified, and that neither Spotted Owls or Goshawks are disturbed.**

**Requiring pre-operational surveys has far higher potential to effectively locate birds prior to disturbance instead of waiting until after operations have started and then expect that raptors can then simply be discovered during timber operations.**

**COMMENT: If pre-treatment surveys for nesting raptors of concern and other nesting birds are not conducted in the treatment area by a qualified biologist. then timber operations should not be allowed to occur during nesting season (between February 15 through September 30) to allow young time to fledge.**

**Response to Concern #6:**

SPI's HCP is part of an application for a Northern and California Spotted Owl incidental take permit that was developed in deliberation with the USFWS, CDFW, and U.S. Forest Service. It describes the anticipated effects of the proposed taking; how those impacts will be minimized or mitigated; and how the HCP is to be funded. Although the CSO is not currently a listed species, conserving species before they are in danger of extinction, or are likely to become so, can also provide early benefits and prevent the need for listing.

On page 173 of the THP, the discussion for Raptors begins. SPI has conducted all the appropriate database searches to determine if known raptors are located within the plan area and within the biological assessment area. The plan elaborates about the protection measures given to listed and non-listed raptors beginning on page 175 of the THP. The THP has protection measures for listed raptors on page 60, Item # 32, and for non-listed raptors on page 63, Item # 32.

On page 63, protection measures for CSO are found and the CSO is discussed in detail beginning on page 182. The THP mentions several historic locations for CSO. Species protection and identification for CSO and other listed and non-listed raptors is discussed in the plan. The THP discusses general survey efforts that will be made for raptor species. There is no provision within the rules of the BOF to provide restoration of habitat for CSO. The species is not currently listed under either the federal or state endangered species acts. The plan contains protections for habitat for any non-listed raptor species, which includes CSO, and these procedures are more than BOF rule requirements. CAL FIRE supports these measures as a preventative way to keep the species from being adversely impacted.

Regarding surveys, on page 75 of the HCP, pre-operational surveys have been conducted since 1990 for CSO, which have been voluntarily accomplished by SPI, and will now be required as part of the HCP.

As described in the PHI attachment, "THP 4-21-00047-TUO (Cobbler) Public Comment and Responses", the Inspector wrote:

Protection measures and survey methods for Northern Goshawk (NOGO), which are the same for listed raptors, are found on page 61. The NGO is discussed in detail beginning on page



175, and indicates no impacts will occur. Protection measures in the plan are in compliance with the Forest Practice Rules.

The Department has determined the plan is in conformance with the rules and significant impacts are not expected.

### **Concern #7: Amphibian Protections**

**As noted in previous comments related to water drafting, Foothill yellow-legged frogs (FYLF) and Sierra Nevada yellow-legged frogs (SNYF) have suitable breeding habitat along the reaches of the North Fork Stanislaus. Even though 2018 surveys did not find FYLF or SNYF, it doesn't provide any assurance that these species are not present in or adjacent to the project area.**

**COMMENT: Our Center strongly asserts that pre-operational surveys should be required within and around the proposed harvest area in suitable habitat in order to ensure that SNYF and FYLF are not disturbed by project operations.**

**If a positive detection occurs for FYLF during surveys or at any time during timber operations, all vegetation and ground disturbing operations should be required to cease within adjacent suitable habitat and a buffer of 40 feet of the observation during the seasonal dry period and within 130 feet during the seasonal wet period. If positive detections occur for SNYF during surveys or at any time during timber operations, all vegetation and ground disturbing operations should be required to cease, and a no operations buffer within 25 meters of the observation and adjacent suitable habitat should be mandated.**

### **Response to Concern #7:**

The THP outlines protection measures for SNYF and FYLF beginning on page 61. A thorough discussion of these species is found beginning on page 162. This includes an assessment of potential SNYF and FYLF breeding and non-breeding habitat and surveys of suitable habitat. Both species discussions conclude either a negative occurrence or are unlikely to have an occurrence. The plan indicates that there are no element recordings or known sightings of SNYF and FYLF within the plan area or BAA except for a questionable sighting in 1953. Additionally, surveys were conducted in 2018 for SNYF and FYLF within the BAA. The surveys did not detect these species. The standard WLPZ protection measures and the protection measures proposed provide sufficient measures to avoid impacts. Should a detection of SNYF or FYLF occur, all vegetation and ground disturbing activities shall cease within 40 feet of the occurrence, and CDFW and CALFIRE shall be consulted to develop site-specific mitigation measures to amend into the THP. CDFW reviewed and evaluated these protection measures during the review process of this THP. The Department has determined the plan is in conformance with the rules and significant impacts to SNYF and FYLF are not expected.

### **Concern #8: Need for Habitat Protection for the Pacific Fisher**

The proposed project, along with nearby past, future, and current projects, significantly and cumulatively reduces forest connectivity (especially of mature conifers) which thus reduces suitable habitat for any fishers that may potentially be present within the project area. The proposed THP assumes that project activity in this region has no detectable effect on sensitive species such as the American Marten and Pacific Fisher.

Unless protocol-consistent surveys are first conducted in the project area, the THP cannot legally base wildlife impact determinations upon the unconfirmed assumption that a rare animal is not present.

**COMMENT:** CSERC urges that either protocol-consistent photo-detection surveys or track plate surveys be required prior to project operations.

Habitat fragmentation is one of the main threats to the fisher according to CDFG's its Status Review of the Fisher (*Martes pennanti*) in California (2010)," the fisher's ability to survive in areas that have had various silvicultural treatments depends on the size, distribution and type of those operations. "Fishers are negatively associated with clearcuts and habitats that are nearly or completely surrounded by clearcuts (Rosenberg and Raphael 1986) (CDFG, 2010)." Throughout this Report, fisher mortality was directly correlated with current timber harvesting practices place is fisher habitat.

Science has shown that fisher mortalities increase in heavily harvested areas due to the reduction of habitat quality (Kelly 1977; Weir and Harstad 1997; Simpson Resource Company 2003). The fisher, especially females, have small home ranges, making them more susceptible to predation in areas with fragmented habitat (Buck et al, 1994:373-374).

It has been well documented that fishers are forest specialists that prefer late seral forests for denning and resting. Late seral forest characteristics such as dense canopy cover, large diameter trees, large snags, large down logs, and understory vegetation of late seral forests for foraging are critical for the fisher survival. Such habitats as described above can be considered the Department's preliminary assessment of essential habitats and habitat elements for the fisher (CDFG).

The fisher is one of several species selected to illustrate conservation issues with the Sierra Nevada and Cascade bioregion. Portions of the account from the 2007 CDFG report are as follows: " ... the status of the Pacific fisher is one indicator of the status of forest condition of the Sierra, particularly the old-growth component" (CDFG 2007). On June 15, 2020 the Southern Sierra Nevada DPS of fisher (*Pekania pennanti*) (SSN DPS) was added as an endangered species to the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal Regulations at 50 CFR 17.11 (h).

**Fish and Wildlife Services basis for action:**

The implications for the DPS's status were loss and fragmentation of habitat ... (i.e., loss of snags and other large habitat structures on which the species relies), climate change, and tree mortality from drought, disease, and insect infestations (Fish and Wildlife Services). The Conservation of the Pacific fisher is dependent

**upon the approaches to and success of restoring healthy and diverse forest ecosystems along the Sierra range" (CDFG 2007:301).**

**This THP will continue to exacerbate the loss of fisher habitat and is not responsive to the latest science. Accordingly, as a CEQA equivalent planning assessment, this THP should reasonably mitigate for potential significant impacts that would occur if this THP further reduces suitable fisher habitat by removing large trees, large snags, large down logs, and closed canopy forest conditions.**

**COMMENT: CSERC asks that either SPI be required to undertake furbearer photodetection (or track plate) surveys consistent with scientific protocols within all project units within the plan area prior to any approval of the TOP. or that SPI be required to retain fisher movement corridor areas with a minimum 60% canopy cover that should retain all large snags (16" dbh». large diameter living trees (24" dbh». and all large diameter down logs (20" dbh) along a 200' wide swath across the project units so as to ensure there is suitable habitat for fisher movement -- not just at the present. but into future decades as the tree plantations gradually evolve into young forest stands.**

#### **Response to Concern #8:**

It is noted the area proposed for management under the THP is not currently occupied by the Pacific Fisher.

As noted in the June 10, 2015 Memorandum to Sonke Mastrup, Executive Director of the California Fish and Game Commission (Status Review of Fisher) from the Director of the California Department of Fish and Wildlife on page 25 of the review:

*"Despite a number of extensive surveys using infrared-triggered cameras conducted by the Department, the US Department of Agriculture Forest Service (USFS), private timber companies, and others since the 1950s, no verifiable detections of fishers have been made in that portion of the Sierra Nevada bounded approximately by the North Fork of the Merced River and the North Fork of the Feather River (Zielinski et al. 1995, 2005)."*

In the past, California specific literature and studies have indicated that the Pacific fisher is currently not found from the Cascade and Sierra Nevada Ranges from the Feather River south to the Tuolumne County area. This would mean that there are hundreds of thousands of acres of forested land in California, which includes National Park lands, National Forest lands and wilderness areas, small private landholdings, etc. wherein there has been no finding of Pacific Fisher in recent times. A published CDFW report, "A Status Review of the Pacific Fisher (*Martes pennanti*) in California" from February 2010 states:

*"There is little empirical evidence of fisher inhabiting this gap in the Sierra Nevada range, although the Department believes they did at some level, and we are largely relying on observation data and trapping reports and distribution accounts described by Grinnell et. al (1937). Thus, as much as 43 percent of the historical range is either (1) not inhabited by fisher now; 2) not part of the historical range; or 3) fisher are extremely*

*rare in this area. In this geographical area, there have been a handful of reported observations since the early 1900s. Overall, the Department concludes that there has not been a substantial change in fisher population distribution since the Grinnell period in the early 1920s, and that natural recolonization of fisher to a former range in any detectable number has not occurred".* The CDFW report goes on to report on preliminary genetic coding data that is suggesting that "gap" in fisher distribution may indicate "separation of the northern and southern populations for thousands of years."

It is apparent from the documentation that this absence of fisher in the "gap" is science-based and not related to the number of surveys that have been completed on private industrial forest lands.

The June 10, 2015 Memorandum and status review of the Pacific Fisher is the latest document from CDFW. The Executive Summary discusses the current range and status of the species in references to land ownership below:

*Within the fisher's current range in the state, greater than 50% of the land base is administered by the US Forest Service (USFS) or the National Park Service. Private lands within the NC ESU and the SSN ESU represent about 41% and 10% of the total area, respectively. Comparing the area assumed to be occupied by fishers in the early 1900s to the distribution of contemporary detections of fishers, it appears the range of the fisher has contracted substantially. This difference is due to the apparent absence of fishers from the central Sierra Nevada, most of the northern Sierra Nevada, and portions of the north Coast Ranges. This apparent long-term contraction notwithstanding, the distribution of fishers in California has been stable and possibly increasing in recent years.*

Analysis of terrestrial habitat within the THP also serves to evaluate the potential pre-harvest and post-harvest habitat, although not specific to Pacific fisher. Terrestrial habitats considered include hardwood cover, presence of snags/dens/nest trees, amount of large woody debris, presence of multi-story canopy, road density, presence of late seral characteristics and late seral stage forests. The THP discusses these resources, and has determined that the operations as proposed will not significantly affect assessment area.

Regarding Pacific fisher, CAL FIRE has considered that, because of this harvest, there will continue to be a variety of stand conditions exist within and adjacent to the THP area and will not be significantly changed by the implementation of the THP. Since Pacific fisher is currently not found on or near SPI ownership in the Cascade and Sierra Nevada Ranges from the Feather River to south of the Tuolumne County area, no additional mitigation is required under CESA.

In 2016, SPI entered into a Candidate Conservation Agreement with Assurances (CCAA) for the Pacific Fisher. A CCAA description can be found at the following web location:

<https://www.fws.gov/endangered/esa-library/pdf/CCAs.pdf>

Retention levels described under Item 38 are in part to meet the requirements of the Fisher CCAA.

After careful review of the information provided both in the record and obtained through additional research, CAL FIRE has determined that operations as proposed are not likely to create significant adverse and cumulative impacts to the species listed in the comment letter.

### **Concern #9: Evenaged Regeneration Size**

Section 953.6 states that SPI may use an alternative prescription when, "an alternative regeneration method or intermediate treatment offers a more effective or more feasible way of achieving the objectives of 913 [933,953] than any of the standard silvicultural methods provided in this Article" (120). Therefore, SPI claims that the alternative prescription (AP) harvest is given an exception in this THP because it is the more effective way of giving consideration to regional economic vitality and aesthetic enjoyment. However, the little tree retention maintained in the AP treatments does little to help the poor aesthetic value that these AP areas of evenaged management (i.e., clearcutting followed by replanted plantations) with a 125- point count (i.e., 125 surviving and growing same age trees per acre) within 5-years post-harvest actually provide.

Giving an exception to AP treatments for "aesthetic enjoyment" is misleading and inaccurate. If SPI and CAL FIRE seriously desire to give consideration to regional economic vitality and aesthetic enjoyment, CAL FIRE should require SPI to adopt a THP based on variable retention principles, with stream corridors and patches or strips of wildlife movement/ scenic value habitat left over at least 15% of each evenage unit in order to provide scenic benefits for enhancing tourism for economic vitality and true aesthetic enjoyment.

### **Response to Concern #9:**

During the review process the THP was revised to change the proposed silviculture from an AP closest to clearcutting to standard clearcutting. Pursuant to 14 CCR 953.1(a)(2) the Forest Practice Rules allow the RPF to propose an increase to the even aged acreage limitations where specific conditions are met. Two units were proposed for an increase to the unit size from the standard 20 acres to 21 and 22 acres. Due to the locations of watercourses, roads, and past harvest units, an increase of 1 to 2 acres allows for a more logical logging unit. The increase in even aged unit size to 21 and 22 acres is in conformance with the allowed conditions in 14 CCR 953.1(a)(2). There's no requirement in the rules to retain 15% of each even-aged unit and to mandate such a requirement would conflict with additional considerations in regards to meeting silvicultural objectives such as achieving MSP.

### **Concern #10: Visual impacts**

Our Center provides support of the comments submitted by Ebbetts Pass Forest Watch regarding visual impacts:

**The THP is required to, but does not, include an adequate analysis for visual impacts. It simply concludes that after considering visual resources, there are no impacts (Cumulative Impacts Assessment Overview, page 127). The THP contains**

**zero evidence of any consideration that it complies with California Environmental Quality Act (CEQA).**

**First the THP does not identify the qualifications of the person preparing the visual impacts review. An independent, qualified person should be included in this review to assess these visual impacts.**

**Second, the THP fails to include any technical or professional evaluation of impacts. It only falsely states that "there are few if any vantage points within 3 miles where THP operations will be visible to significant numbers of people " (Section 4, E. Visual Resources, page 189). The THP further misstates that "the majority of the THP area is located on canyon terrain with a south facing aspect and geographically is not generally visible to significant numbers of people". Minimal consideration is given to visual impacts from post-harvest stocking, where even-aged tree plantations will replace a natural looking forest. The harvest area is located along State Highway 4, a National Scenic Highway. State Highway 4, besides being the major road used by local year-round residents, is highly traveled by recreational visitors in the summer months, and the only access to Bear Valley Ski Resort in the winter months.**

**Half the timber tracts identified for harvesting (1587m, 1529m, 3557m, 3370m, 3460m, 3451m, 3506m, 3351m, and 3381m) border State Highway 4 and the remaining tracts are located relatively close to the highway. This THP area is definitely highly visible to all travelers along Highway 4. Furthermore, a good portion of the harvest is adjacent to Cottage Springs, a residential area comprised of permanent residents as well as seasonal homes.**

**The THP is required to, but does not, consider or propose any mitigation measures for visual impacts along this scenic highway. EPFW recommends that, at least, such mitigation must include 200 feet set back from any roads used by the public, areas visible from local homes, and highly used recreational areas.**

**Finally, CEQA requires that different alternatives be considered. Section 3 of the Grindstone THP identifies six different project alternatives that include the project as proposed in the THP, alternate sites, public acquisition of property, no project, etc. However, the THP never considers as an alternative, selective harvest. It had been considered, it would have retained the look of a natural forest, avoided the use of herbicides, maintained canopy cover similar to the adjacent forests important for slowing snowmelt, and minimizing impacts on wildlife while also not creating negative visual impacts.**

#### **Response to Concern #10:**

See the response for Concern #2.

#### **Concern #11: Significant Cumulative Impacts**

As noted in the first paragraph of these comments, this THP would allow for 332 acres of alternative prescription (evenage logging) similar to clearcut logging treatments. This will continue to cumulatively diminish the number of medium and large conifer trees in the project area and further convert unevenaged biologically diverse forest habitat into uniform, much more simplified and sterile habitat conditions as young tree plantations eventually grow into tree farm crops. The Project area has already been logged multiple times over more than a century and many times in recent years such as the past decade - e.g. 2019 Village THP, 2019 Geazzer, and 2018 Sour Boards. In addition, the Rattlesnake THP is planned to occur in the next 2 years. This area contains primarily second and third growth mixed conifer timber stands. All the previous associated SPI projects have reduced canopy cover and degraded habitat for many wildlife species -- e.g. Pacific fisher, American marten, Northern Goshawk, Northern flying squirrel, and many more.

The Google Earth images below of this THP area and the surrounding area show how a checkerboard of clear-cuts already has **SIGNIFICANTLY** diminished mature forest habitat, created denuded or heavily disturbed watershed conditions, and degraded scenic, watershed, and soil resources. Approval of this THP as is currently proposed will add to the continued cumulative degradation of watershed and forest health.

The Google Earth images below of this THP area and the surrounding area show how a checkerboard of clear-cuts already has **SIGNIFICANTLY** diminished mature forest habitat, created denuded or heavily disturbed watershed conditions, and degraded scenic, watershed, and soil resources. Approval of this THP as is currently proposed will add to the continued cumulative degradation of watershed and forest health.

The Director is legally required to consider the cumulative significant impacts of this THP and the associated impacts from all the adjacent even age treatments to the project area. This THP will not simply result in an isolated negative effect, but it will result in a contributing impact as part of a series of cumulative effects from SPI forest treatments that have taken place and continue to take place throughout the overall forest region overlapping with this specific THP project area.

Project area is surrounded by a patchwork of heavily logged areas.

**COMMENT:** Our center urges the Director to coordinate with CDFW to develop an appropriate mitigation plan to decrease the impacts of this THP combined with past, present, and foreseeable future projects to reduce the potential for negative cumulative effects to below a level of significance.

#### **Response to Concern #11:**

Submitted THPs are reviewed by the Director to determine the potential for significant adverse cumulative impacts. Each plan is reviewed considering past, present and foreseeable future projects, and how these environments have recovered and responded to site-specific mitigations with the application of the CFPR.

Per the CFPR, the Director is required to examine the cumulative impacts of timber harvests and related projects on a watershed assessment area (WAA) of approximately 10,000 acres, along with a biological assessment area designed for the consideration of wildlife. Within the CFPR, Technical Rule Addendum No. 2 establishes the framework for the assessment of cumulative impacts. If impacts are to occur, they will happen on the ground within the WAA and may not be detectable on aerial imagery. That is why it is necessary to examine the area on-the-ground, via a Pre-Harvest Inspection (PHI) with Interagency Review Team representatives, and analyze the findings in the THP.

With respect to the view from Google Earth or other aerial views, this does not reflect the complete consideration when assessing cumulative impacts. CAL FIRE finds that the overhead view from such a distance is unable to discern accurately the amount of regrowth that has occurred, especially where some of the vegetation features such as brush, grass and forbs are small, when compared to neighboring retention overstory trees that show up on the aerial images. It is not especially easy to pick out the detailed features of recovering vegetation, individual or grouped retention trees, or seedling growth from an aerial photo.

CAL FIRE utilizes either Geographic Information Systems (GIS) software, or its publicly available online "Forest Practice Watershed Mapper v2" application. These tools are utilized by Review Team staff to view the proposed operations to get an overview, and to determine if other rules pertaining to forest practices, such as maintaining the adjacency requirements for even-aged units or determining if proposed silvicultures are allowed under the CFPR, are being adhered to in plan proposals.

Confirmation of what is found in these tools occurs during on-the-ground inspections, active harvesting inspections, and post-harvest compliance. CAL FIRE relies heavily on observations made on-the-ground from inspectors. Inspectors evaluate the plan and assessment areas during the preharvest inspections of THPs.

In 1999, SPIs option "a" adopted new standards for their even-aged regeneration harvest areas in which 2% minimum islands of trees would be retained in HRAs. The option "a" document demonstrated how the planned harvest will be projected to yield a continuously increasing harvest level over the planning horizon, and would result in increasing tree diameters over time as compared to the first decade starting point. The option "a" plan explained how the projected growth has been constrained by the required protection of "other forest values" such as watershed, scenic, and soil resources. It provided the Department with an analysis of long term sustained yield, as required by the CFPR, and has determined that even-aged management is the silviculture to achieve Maximum Sustained Production of high quality timber products. This management regime does not preclude SPI from ensuring that public trust resources are protected, and the 4-21-00140-CAL THP discloses the potential impacts described in Technical Rule Addendum #2, Cumulative Impacts Assessment Guidelines. CAL FIRE finds that even-age regeneration harvest is consistent with the analysis done in the SPI option "a" sustained yield plan for SPI lands within the Southern Forest District.

CAL FIRE has concluded that the plan meets the requirements of the CFPR and is compliant with SPIs Option "a" plan, while taking into consideration the various public trust resources.



**Concern #12:**

The Central Sierra Environmental Resource Center (CSERC) submits these supplemental comments to CAL FIRE in response to planned changes in the Grindstone THP. The Grindstone THP was originally proposed to allow 43 acres of selection logging, 332 acres of alternative prescription, and 13 acres of fuel break / defensible space. The total project acreage of this THP was defined as 380 acres. Now the project as revised would allow 332 acres of clearcuts, 23 acres of selection logging, 13 acres of fuel break / defensible space. The total project acreage of this THP is now shown as 368 acres, in addition to 127 acres of operational buffer.

The Grindstone THP area is located along the forest corridor of State Highway 4. State Highway 4 is a National Scenic Highway that is a major travel passage used by year-round residents, year-round recreational visitors, and many others. This THP area is highly visible to Highway 4 travelers and to area residents. Many of the clearcut units proposed for logging are located in close proximity to the highway, and even when separated from the highway by the scenic byway strip, the denuded treatment units are still likely to be fully visible to hundreds of thousands of travelers each year who drive the route.

Scenic screening may reduce visibility of units during spring, summer and early fall. Units are especially visible to motorists in the fall and winter period. SPI may argue that the screening already present along the corridor prevents impacts from being seen, however past clearcut units on the other side of the scenic buffer zone have caught the eye of CSERC Staff many times when driving along the highway (see photos below). If CAL FIRE seriously desires to minimize the THP's visual impacts on the region's economic vitality and the scenic values that may otherwise be significantly affected by the project, CAL FIRE should require SPI to adopt a THP that applies variable retention principles along the portions of all units that can be seen from the highway. Such principles would include the retention of trees and associated vegetation along seasonal stream drainages and the retention of patches or strips of existing forest vegetation to provide for wildlife movement/scenic value habitat so that post-treatment retained vegetation would exist over at least 15% of each evenage unit. That mitigation strategy would adequately protect scenic benefits that are so important for tourism and the region's economic vitality.

CSERC fully recognizes SPI's right to manage and operate treatments on the company's private lands in a manner that complies with Forest Practice Rules and with other applicable regulatory requirements. We assert that SPI can achieve THP objectives while also providing reasonable mitigation for the scenic impacts that will occur unless modifications are made to the THP.

Our Center recommends that at least 200 feet of additional vegetative screening be required to buffer SPI's treatments along the scenic byway strip of the main highway corridor. We also recommend a similar buffer of vegetative screening be required through the use of variable retention principles or other means for the THP areas visible from any residences.

The key point emphasized with our comments is that the Director has a responsibility to balance the scenic goals of the National Scenic Highway corridor with the wood production goals of SPI. We believe both goals can be achieved if additional screening and variable retention-type habitat protection is required to be applied to the portions of all evenage units that lie closest to the highway corridor or to any areas of residences.

In addition to raising the concerns described above, our Center also provides support for the local citizen comments being submitted by Ebbetts Pass Forest Watch regarding the impacts of clearcut treatments on their community and the highway corridor.

### Summary

This THP as now proposed would allow for 332 acres of clearcut logging treatments that will continue to diminish mature forest habitat, will affect watershed conditions, will degrade scenic values, and will further convert biologically diverse forest habitat into uniform young tree plantations. While legally allowable under the state's Forest Practice Act, approval of this THP as it is currently proposed will add to the continued cumulative degradation of watershed and forest health values within the overall treatment area. Based on decades of our Center commenting on the ecological effects of such widespread conversion of diverse forest to uniform, sterile tree plantations, we recognize that the Director does not acknowledge any ecological degradation from evenage forest management; and we recognize that no modification of the THP will likely be required based on environmental grounds.

But at the very least, the Director should require meaningful mitigation measures to effectively reduce the potential for significant scenic impacts that will otherwise likely degrade the National Scenic Highway values of the highway corridor.

### Response to Concern #12:

All timber harvesting plans must address the potential impacts the project could have on visual resources. Specifically, Technical Rule Addendum #2, Item E specifies the following:

***E. VISUAL RESOURCES:** The visual assessment area is generally the logging area that is readily visible to significant numbers of people who are no further than three miles from the timber operation. To assess visual cumulative effects:*

- 1. Identify any Special Treatment Areas designated as such by the Board because of their visual values.*
- 2. Determine how far the proposed timber operation is from the nearest point that significant numbers of people can view the timber operation. At distances of greater than 3 miles from viewing points activities are not easily discernible and will be less significant.*
- 3. Identify the manner in which the public identified in 1 and 2 above will view the proposed timber operation (from a vehicle on a public road, from a stationary public viewing point or from a pedestrian pathway).*

The Forest Practice Rules under 14 CCR 898 and the Board of Forestry and Fire Protection Technical Rule Addendum number 2 (TRA#2), specifically instruct the Registered Professional Forester to conduct a Cumulative Impacts Assessment. This assessment includes the evaluation of impacts on visual resources. Additionally, evaluating Impacts on visual resources associated with forestry activities is part of the science and practice of forestry. Professional Foresters Law defines Forestry as,

*“Forestry,” as used in this article, refers to the science and practice of managing forested landscapes and the treatment of the forest cover in general, and includes, among other things, the application of scientific knowledge and forestry principles in the fields of fuels management and forest protection, timber growing and utilization, forest inventories, forest economics, forest valuation and finance, and the evaluation and mitigation of Impacts from forestry activities on watershed and scenic values, to achieve the purposes of this article. The practice of forestry applies only to those activities undertaken on forested landscapes. The professions specified in Section 772 are not practicing forestry when mitigating or recommending mitigation of Impacts from previous forestry activities on related watershed or ecological values within their area of professional expertise or when recommending those mitigations for proposed Timber Operations. However, public and private foresters are required to be licensed pursuant to this article when making evaluations and determinations of the appropriate overall combination of mitigations of Impacts from forestry activities necessary to protect all forest resources.*

The evaluation and mitigation of Impacts from forestry activities on watershed and scenic values is described in the definition of Forestry in PRC 753. It is within the scope of a professional forester's license to evaluate and mitigate impacts on scenic values associated with forestry activities. The Department finds the Registered Professional Forester is the appropriate person to evaluate and mitigate Impacts from forestry activities on visual resources.

During the review process of the THP, the visual resources evaluation and discussion was revised to include additional information and justification. Areas within the visual assessment area where significant numbers of people may be present were individually analyzed. Big Trees Village Subdivision, Dorrington, Camp Connell, Black Springs USFS OHV area, Ganns, USFS Sourgrass Area, and Board Crossing community area have a visual screen from the THP area due to forest cover and topography. Calaveras Big Trees State Park is over 3 miles from the THP area and is also screened by forest cover and topography. A portion of the THP is adjacent to Cottage Springs. The area adjacent to Cottage Springs will be treated as a fuelbreak. In this area, fuels will be reduced through the reduction of vertical and horizontal fuels by removing brush, suppressed and intermediate trees. Upon completion of the fuelbreak the area within the fuelbreak will still have a forested appearance of spaced dominant and co-dominant trees.

Highway 4, which is designated as a scenic highway bisects the general THP area. There is an approximately 500 feet wide area of federally owned property managed by the USFS located east of Big Trees Village Subdivision to Cottage Springs. This area of federal property is approximately 250 wide on both sides of the highway. As defined in 14 CCR 895.1, a Special Treatment Area for state designated scenic highways is the area within 200 feet of the

highway. SPI's ownership and this THP is located outside of the STA for Highway 4. The edge of the even-aged units in this THP are located approximately 250 feet from Highway 4. The units near Highway 4 are buffed by a 250-foot area of mature forest land managed by the USFS. This buffer offers a visual buffer between motorist using Highway 4 and the even-aged harvest units proposed in this THP. Page 189.01 further describes the visual buffer as follows,

*“USFS managed property within the STA and approximately 500-foot-wide federal ownership segment in the THP area and bisected by State Highway 4 is generally characterized by mature, well-timbered forest stands with a preponderance of large dormant and codominant trees. USFS operations in the past 20 years have focused on periodic hazard tree removal and treatment of ground and ladder fuels, primarily with mechanical mastication. As such, the STA and additional area comprising approximately 250-feet of timbered ground on each side of Highway 4 create a significant visual buffer between the highway, SPI property, and Grindstone THP harvest units. Similarly, roadside timber stands and a generally timbered landscape in the Cottage Springs area provide a significant visual buffer between the highway, SPI property, and the Grindstone THP harvest units as well. In addition to the high level of visual screening/filtering of the view from Highway 4, road users in motor vehicles traveling on the state highway in this area at an average estimated speed of 50-55 miles-per-hour have only brief, momentary views of the road side area.”*

Visual impacts are difficult to quantify because there are as many opinions on what a significant impact looks like as there are people. CAL FIRE must exercise professional judgement when reviewing proposed plans and their impact on Visual Resources.

When doing so, CAL FIRE must balance many competing objectives. For example, lands zoned Timber Production Zone by Calaveras County have been designated as lands to be used primary for the production of timber or other compatible uses:

*(g) “Timberland production zone” or “TPZ” means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h).*

*With respect to the general plans of cities and counties, “timberland preserve zone” means “timberland production zone.”*

*(h) “Compatible use” is any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber, and shall include, but not be limited to, any of the following, unless in a specific instance such a use would be contrary to the preceding definition of compatible use:*

*(1) Management for watershed.*

*(2) Management for fish and wildlife habitat or hunting and fishing.*

*(3) A use integrally related to the growing, harvesting and processing of forest products, including but not limited to roads, log landings, and log storage areas.*

*(4) The erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities.*

*(5) Grazing.*

*(6) A residence or other structure necessary for the management of land zoned as timberland production.*

When it comes to timber harvesting, the plan must balance many objectives in deciding how to best meet the landowners objectives while complying with statute and regulations.

**897(a) [In Part]**

*The Timberland Productivity Act restricts use of lands zoned Timberland Production Zone to growing and harvesting timber and compatible uses and establishes a presumption that timber harvesting is expected to and will occur on such lands.*

**4513. Timberlands; creation and maintenance of system of regulation and use; legislative intent.**

*It is the intent of the Legislature to create and maintain an effective and comprehensive system of regulation and use of all Timberlands so as to ensure both of the following:*

*(a) Where feasible, the productivity of Timberlands is restored, enhanced, and maintained.*

*(b) The goal of maximum sustained production of high-quality timber products is achieved while giving consideration to values relating to sequestration of carbon dioxide, recreation, watershed, wildlife, range and forage, fisheries, regional economic vitality, employment, and aesthetic enjoyment.*

**14 CCR §895.1**

**While Giving Consideration** means the selection of those feasible silvicultural systems, operating methods and procedures which substantially lessen significant adverse impact on the environment and which best achieve long-term, maximum sustained production of forest products, while protecting soil, air, fish and wildlife, and water resources from unreasonable degradation, and which evaluate and make allowance for values relating to range and forage resources, recreation and aesthetics, and regional economic vitality and employment.

Pages 109 to 117 includes a discussion regarding the factors considered in the silvicultural decision. The THP describes why the landowner has decided to use predominately even aged silvicultural methods and why other methods such as uneven aged management were rejected. The visual buffer provided by the federally owned parcel adjacent to Highway 4 already offers a greater area than what is required for a Special Treatment Area for scenic highways per the Forest Practice Rules. Due to the existing forest cover within the approximately 500-foot strip of federally owned land adjacent to Highway 4 and the existing screening due to topography, there is no reasonably potential significant effect from the proposed THP.

Ultimately, the RPF who writes the plan must consider these and other regulations when deciding on the harvesting methods that will achieve the landowner's goals while meeting the objectives of the Forest Practice Rules and the Forest Practice Act. Likewise, CAL FIRE must consider the range of values that must be evaluated while allowing for legally permitted activities on Timberland. These activities are often a tradeoff between competing and sometimes contradictory objectives. CAL FIRE believes that the plan as approved will not have a significant adverse visual effect.

**Concern #13:**

We have reviewed Sierra Pacific Industries (SPI) resubmitted changes regarding their Cumulative Visual Impacts analysis in the 4-21-00140-CAL, Grindstone Timber Harvest Plan (THP). Needless to say, we are very disappointed with the THP revisions. The only substantial change we can identify is changing the harvesting method from alternative prescription to an outright clearcut. How does this change improve visual impacts along a National Scenic Byway? Most of our below original visual concerns have been never addressed.

- SPI still has not identified the qualifications of the person preparing the visual impacts review. An independent, qualified person should be included in this review to assess these visual impacts.
- In Section 4, E. Visual Resources, page 189.1 it stated, " ... road users in motor vehicles traveling on the state highway in this area at an average estimated speed of 50-55 mph have only brief, momentary views of the roadside area." In reality, the view the public will be seeing is a USFS managed strip of forest whose understory been mechanically masticated, thereby further opening the view onto clearcut lands. This vision is not what National Scenic Byway designation represents. As well, visual impacts are visual impacts according to the Forest Practice Rules, regardless of how long anyone looks at an individual one. And, although, there may be a speed limit of 55mph through the THP area, driving that fast on that mountain highway is generally unfeasible and unsafe.
- Minimal consideration is given to visual impacts from post-harvest stocking, where even-aged tree plantations will replace a natural looking forest.
- Why was a selective harvest not considered as an alternative? CEQA and NEPA state the purpose and intent of alternatives are to "ensure that the range of alternatives does not foreclose prematurely any option that might protect, restore and enhance the environment."

Again, we remind you, that half the timber tracts identified for harvesting {1587m, 1529m, 3557m, 3370m, 3460m, 3451m, 3506m, 3351m, and 3381m) border State Highway 4 and the remaining tracts are located relatively close to the highway. This THP area is definitely highly visible to all travelers along Highway 4. Furthermore, a good portion of the harvest is adjacent to Cottage Springs, a residential area comprised of permanent residents and as well as seasonal homes.

EPFW believes that the Grindstone THP cannot be approved as this plan will surely degrade the value of our National Scenic Byway designation and we highly recommend that this harvesting method be changed from clearcuts to a selective harvest. A selective harvest would have retained the look of a natural forest. In addition, selective harvests would avoid the use of herbicides, maintain canopy cover similar to the adjacent forests important for slowing snow melt, and minimize impacts on wildlife while also not creating negative visual impacts.

**Response to Concern #13:**

All timber harvesting plans must address the potential impacts the project could have on visual resources. Specifically, Technical Rule Addendum #2, Item E specifies the following:

***E. VISUAL RESOURCES:** The visual assessment area is generally the logging area that is readily visible to significant numbers of people who are no further than three miles from the timber operation. To assess visual cumulative effects:*

- 1. Identify any Special Treatment Areas designated as such by the Board because of their visual values.*
- 2. Determine how far the proposed timber operation is from the nearest point that significant numbers of people can view the timber operation. At distances of greater than 3 miles from viewing points activities are not easily discernible and will be less significant.*
- 3. Identify the manner in which the public identified in 1 and 2 above will view the proposed timber operation (from a vehicle on a public road, from a stationary public viewing point or from a pedestrian pathway).*

The Forest Practice Rules under 14 CCR 898 and the Board of Forestry and Fire Protection Technical Rule Addendum number 2 (TRA#2), specifically instruct the Registered Professional Forester to conduct a Cumulative Impacts Assessment. This assessment includes the evaluation of impacts on visual resources. Additionally, evaluating Impacts on visual resources associated with forestry activities is part of the science and practice of forestry. Professional Foresters Law defines Forestry as,

*“Forestry,” as used in this article, refers to the science and practice of managing forested landscapes and the treatment of the forest cover in general, and includes, among other things, the application of scientific knowledge and forestry principles in the fields of fuels management and forest protection, timber growing and utilization, forest inventories, forest economics, forest valuation and finance, and the evaluation and mitigation of Impacts from forestry activities on watershed and scenic values, to achieve the purposes of this article. The practice of forestry applies only to those activities undertaken on forested landscapes. The professions specified in Section 772 are not practicing forestry when mitigating or recommending mitigation of Impacts from previous forestry activities on related watershed or ecological values within their area of professional expertise or when recommending those mitigations for proposed Timber Operations. However, public and private foresters are required to be licensed pursuant to this article when making evaluations and determinations of the appropriate overall combination of mitigations of Impacts from forestry activities necessary to protect all forest resources.*

The evaluation and mitigation of Impacts from forestry activities on watershed and scenic values is described in the definition of Forestry in PRC 753. It is within the scope of a professional forester's license to evaluate and mitigate impacts on scenic values associated with forestry activities. The Department finds the Registered Professional Forester is the appropriate person to evaluate and mitigate Impacts from forestry activities on visual resources.

During the review process of the THP, the visual resources evaluation and discussion was revised to include additional information and justification. Areas within the visual assessment area where significant numbers of people may be present were individually analyzed. Big Trees Village Subdivision, Dorrington, Camp Connell, Black Springs USFS OHV area, Ganns, USFS Sourgrass Area, and Board Crossing community area have a visual screen from the THP area due to forest cover and topography. Calaveras Big Trees State Park is over 3 miles from the THP area and is also screened by forest cover and topography. A portion of the THP is adjacent to Cottage Springs. The area adjacent to Cottage Springs will be treated as a fuelbreak. In this area, fuels will be reduced through the reduction of vertical and horizontal fuels by removing brush, suppressed and intermediate trees. Upon completion of the fuelbreak the area within the fuelbreak will still have a forested appearance of spaced dominant and co-dominant trees.

Highway 4, which is designated as a scenic highway bisects the general THP area. There is an approximately 500 foot wide area of federally owned property managed by the USFS located east of Big Trees Village Subdivision to Cottage Springs. This area of federal property is approximately 250 wide on both sides of the highway. As defined in 14 CCR 895.1, a Special Treatment Area for state designated scenic highways is the area within 200 feet of the highway. SPI's ownership and this THP is located outside of the STA for Highway 4. The edge of the even-aged units in this THP are located approximately 250 feet from Highway 4. The units near Highway 4 are buffed by a 250-foot area of mature forest land managed by the USFS. This buffer offers a visual buffer between motorist using Highway 4 and the even-aged harvest units proposed in this THP. Page 189.01 further describes the visual buffer as follows,

*“USFS managed property within the STA and approximately 500-foot-wide federal ownership segment in the THP area and bisected by State Highway 4 is generally characterized by mature, well-timbered forest stands with a preponderance of large dormant and codominant trees. USFS operations in the past 20 years have focused on periodic hazard tree removal and treatment of ground and ladder fuels, primarily with mechanical mastication. As such, the STA and additional area comprising approximately 250-feet of timbered ground on each side of Highway 4 create a significant visual buffer between the highway, SPI property, and Grindstone THP harvest units. Similarly, roadside timber stands and a generally timbered landscape in the Cottage Springs area provide a significant visual buffer between the highway, SPI property, and the Grindstone THP harvest units as well. In addition to the high level of visual screening/filtering of the view from Highway 4, road users in motor vehicles traveling on the state highway in this area at an average estimated speed of 50-55 miles-per-hour have only brief, momentary views of the road side area.”*

Visual impacts are difficult to quantify because there are as many opinions on what a significant impact looks like as there are people. CAL FIRE must exercise professional judgement when reviewing proposed plans and their impact on Visual Resources.

When doing so, CAL FIRE must balance many competing objectives. For example, lands zoned Timber Production Zone by Calaveras County have been designated as lands to be used primary for the production of timber or other compatible uses:



(g) “Timberland production zone” or “TPZ” means an area which has been zoned pursuant to Section 51112 or 51113 and is devoted to and used for growing and harvesting timber, or for growing and harvesting timber and compatible uses, as defined in subdivision (h).

With respect to the general plans of cities and counties, “timberland preserve zone” means “timberland production zone.”

(h) “Compatible use” is any use which does not significantly detract from the use of the property for, or inhibit, growing and harvesting timber, and shall include, but not be limited to, any of the following, unless in a specific instance such a use would be contrary to the preceding definition of compatible use:

(1) Management for watershed.

(2) Management for fish and wildlife habitat or hunting and fishing.

(3) A use integrally related to the growing, harvesting and processing of forest products, including but not limited to roads, log landings, and log storage areas.

(4) The erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission facilities.

(5) Grazing.

(6) A residence or other structure necessary for the management of land zoned as timberland production.

When it comes to timber harvesting, the plan must balance many objectives in deciding how to best meet the landowner’s objectives while complying with statute and regulations.

#### **897(a) [In Part]**

*The Timberland Productivity Act restricts use of lands zoned Timberland Production Zone to growing and harvesting timber and compatible uses and establishes a presumption that timber harvesting is expected to and will occur on such lands.*

#### **4513. Timberlands; creation and maintenance of system of regulation and use; legislative intent.**

*It is the intent of the Legislature to create and maintain an effective and comprehensive system of regulation and use of all Timberlands so as to ensure both of the following:*

**(a)** *Where feasible, the productivity of Timberlands is restored, enhanced, and maintained.*

**(b)** *The goal of maximum sustained production of high-quality timber products is achieved while giving consideration to values relating to sequestration of carbon dioxide, recreation, watershed, wildlife, range and forage, fisheries, regional economic vitality, employment, and aesthetic enjoyment.*

#### **14 CCR §895.1**

**While Giving Consideration** means the selection of those feasible silvicultural systems, operating methods and procedures which substantially lessen significant adverse Impact on the environment and which best achieve long-term, maximum sustained production of forest products, while protecting soil, air, fish and wildlife, and water resources from unreasonable degradation, and which evaluate and make allowance for values relating to range and forage resources, recreation and aesthetics, and regional economic vitality and employment.

Pages 109 to 117 includes a discussion regarding the factors considered in the silvicultural decision. The THP describes why the landowner has decided to use predominately even aged silvicultural methods and why other methods such as uneven aged management were rejected. The visual buffer provided by the federally owned parcel adjacent to Highway 4 already offers a greater area than what is required for a Special Treatment Area for scenic highways per the Forest Practice Rules. Due to the existing forest cover within the approximately 500-foot strip of federally owned land adjacent to Highway 4 and the existing screening due to topography, there is no reasonably potential significant effect from the proposed THP. CEQA requires a description of a range of alternatives to the project which would avoid or substantially lessen any of the significant effects of the project. The proposed will not result in a significant impact to visual resources therefore analyzing additional silvicultural alternatives is not necessary.

Ultimately, the RPF who writes the plan must consider these and other regulations when deciding on the harvesting methods that will achieve the landowner's goals while meeting the objectives of the Forest Practice Rules and the Forest Practice Act. Likewise, CAL FIRE must consider the range of values that must be evaluated while allowing for legally permitted activities on Timberland. These activities are often a tradeoff between competing and sometimes contradictory objectives. CAL FIRE believes that the plan as approved will not have a significant adverse visual effect.

## SUMMARY AND CONCLUSIONS

**The Department recognizes its responsibility** under the Forest Practice Act (FPA) and CEQA to determine whether environmental impacts will be significant and adverse. In the case of the management regime which is part of the THP, significant adverse impacts associated with the proposed application are not anticipated.

**CAL FIRE has reviewed the potential impacts from the harvest and reviewed concerns** from the public and finds that there will be no expected significant adverse environmental impacts from timber harvesting as described in the Official Response above. Mitigation measures contained in the plan and in the Forest Practice Rules adequately address potential significant adverse environmental effects.

**CAL FIRE has considered all pertinent evidence and has determined that no significant** adverse cumulative impacts are likely to result from implementing this THP. Pertinent evidence includes, but is not limited to the assessment done by the plan submitter in the watershed and biological assessment area and the knowledge that CAL FIRE has regarding activities that have occurred in the assessment area and surrounding areas where activities could potentially combine to create a significant cumulative impact. This determination is based on the framework provided by the FPA, CCR's, and additional mitigation measures specific to this THP.

**CAL FIRE has supplemented the information contained in this THP in conformance** with Title 14 CCR § 898, by considering and making known the data and reports which have been submitted from other agencies that reviewed the plan; by considering pertinent information from other timber harvesting documents including THP's, emergency notices, exemption

notices, management plans, etc. and including project review documents from other non-CAL FIRE state, local and federal agencies where appropriate; by considering information from aerial photos and GIS databases and by considering information from the CAL FIRE maintained timber harvesting database; by technical knowledge of unit foresters who have reviewed numerous other timber harvesting operations; by reviewing technical publications and participating in research gathering efforts, and participating in training related to the effects of timber harvesting on forest values; by considering and making available to the RPF who prepares THP's, information submitted by the public.

**CAL FIRE further finds that all pertinent issues and substantial questions raised** by the public and submitted in writing are addressed in this Official Response. Copies of this response are mailed to those who submitted comments in writing with a return address.

**ALL CONCERNS RAISED WERE REVIEWED AND ADDRESSED. ALONG WITH THE FRAMEWORK PROVIDED BY THE FOREST PRACTICE ACT AND THE RULES OF THE BOARD OF FORESTRY, AND THE ADDITION OF THE MITIGATION MEASURES SPECIFIC TO THIS THP, THE DEPARTMENT HAS DETERMINED THAT THERE WILL BE NO SIGNIFICANT ADVERSE IMPACTS RESULTING FROM THE IMPLEMENTATION OF THIS THP.**

RECEIVED

OCT 13 2021

CA. DEPT. OF FORESTRY  
RESOURCE MANAGEMENT

October 8, 2021

Forest Practice Program Manager  
CAL FIRE  
1234 East Shaw Avenue  
Fresno, California 93710

Reviewed by:	YE
Dist. by:	✓
Dist. Date:	11/17/21
RU	PS
FG	TO
WQ	TLO
ARCH	LTO
RPF	DMG
INSP	BOE
OTHER:	
FPS	✓
Status	LOC

RE: **Wildfire Risk and Hazard**, 4-21-00140-CAL, Grindstone Timber Harvest Plan (THP).

Dear Director,

My family has owned a cabin in the Dorrington area for the past forty years. The cabin is located approximately five miles down the highway from where the proposed harvesting is to take place. Sections IV, pages 193 -194 of the Grindstone THP (Wildfire Risk and Hazard) describes the THP as being in a very high fire severity hazard zone.

In accordance with the Grindstone THP, the project consists of 368-acre timber harvest of which 332 acres is alternative prescription harvest. The alternative prescription harvest described is for all intent and purposes are clearcuts. Given the extensive clearcutting and harvesting operations that have taken place in this area alone in the past 10 to 20 years, there are significant wildfire risks and hazards caused by the proposed project. There are a number of forest fire studies that show clearcut harvesting and subsequent even-age tree plantations leads directly to increase in the intensity and spread of wildfire

A number of recent forest fire studies have shown clearcut harvesting and subsequent even-aged tree plantations lead directly to increase in the intensity and spread of wildfire. Accordingly, we need to protect the "over-story" tree canopy that moderates the "microclimate" of the forest floor. Reduction of the tree canopy which occurs in a clearcut and can occur to a lesser degree in commercial thinning exposes the forest floor to increased sun and wind, causing increased surface temperatures and decreased relative humidity. The temperature increase in turn causes surface fuels to be hotter and drier, resulting in faster rates of fire spread, greater flame lengths and fire line intensities, and more erratic shifts in the speed and direction of fires.

The Western Fire Ecology Center states that small-diameter surface fuels (such as even-aged plantations younger than ten years) are the primary carriers of fire. Current fire spread models do not even consider fuels greater than three inches in diameter because it is mainly the fine-sized surface fuels that allows fire spread. Commercial logging operations remove large-diameter fuels which are naturally fire resistant, and replaces them with even-aged plantations with fire-prone small-diameter fuels. Timber plantations are usually comprised of densely-stocked, even-aged stands of young conifers that are extremely flammable and vulnerable to catastrophic fire effects. Consideration should be given to using Selective Harvest rather than Alternative Prescription because of the fire risks associated with the proposed even-aged plantations.

Satellite mapping of this last month's Caldor Fire show that even with extensive fuel reduction in the burned areas over the last several years, it had minimal effect on slowing the growth and intensity of the fire. In fact, the younger tree plantations may have contributed to the growth of the fire.

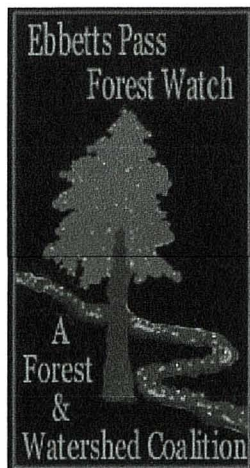
In a recent article in the San Francisco Chronicle, it stated "In the wilderness, fire crews couldn't combat the fast-moving flames head-on, instead going in after the fire front moved through to try to save homes and cabins". It is probably time that we starting using our money to home harden communities rather than trying to control wildfires during extreme drought conditions.

Sincerely,

A handwritten signature in black ink that reads "Ken Metzger". The signature is written in a cursive style with a large, stylized "K" and "M".

Ken Metzger  
1223 Whispering Pines Court  
Visalia, California 93277





RECEIVED

OCT 20 2021

CA. DEPT. OF FORESTRY  
RESOURCE MANAGEMENT

Ebbetts Pass Forest Watch  
Post Office Box 501  
San Andreas, California 95249  
telephone (209) 795-8260  
email: [epfw@goldrush.com](mailto:epfw@goldrush.com)

Forest Practice Program Manager  
CAL FIRE  
1234 East Shaw Avenue  
Fresno, California 93710

October 18, 2021

Comments from Ebbetts Pass Forest Watch on THP 4-21-00140 (Grindstone)

To whom it may concern:

The following comments concern the inadequacy of the **Cumulative Visual Impacts analysis** in the 4-21-00140-CAL, Grindstone Timber Harvest Plan (THP).

Grindstone THP consists of 368-acre timber harvest of which 332 acres is alternative prescription harvest. The alternative prescription harvest described is for all intent and purposes clear-cuts, harvested in groupings up to 22 acres in size. Post-harvest stocking for alternative prescription lands consists of even-aged management (i.e., clearcutting followed by replanted plantations) with a 125-point count (i.e., 125 surviving and growing same age trees per acre) within 5-years post-harvest.

The Grindstone THP area is located approximately 3 miles northeast of Dorrington in the area surrounding Cottage Springs.

The THP is required to, but does not, include an adequate analysis for visual impacts. It simply concludes that, after considering visual resources, there are no impacts (Cumulative Impacts Assessment Overview, page 127). The THP contains zero evidence of any consideration that it complies with California Environmental Quality Act (CEQA).

- First, the THP does not identify the qualifications of the person preparing the visual impacts review. An independent, qualified person should be included in this review to assess these visual impacts.
- Second, the THP fails to include any technical or professional evaluation of impacts. It only falsely states that "there are few if any vantage points within 3 miles where THP operations will be visible to significant numbers of people" (Section 4, E. Visual Resources, page 189). The THP further misstates that "the majority of the THP area is located on canyon terrain with a south facing aspect and geographically is not generally visible to significant numbers of people".
- Minimal consideration is given to visual impacts from post-harvest stocking, where even-aged tree plantations will replace a natural looking forest.

Reviewed by:	<u>FR</u>
Dist. by:	<u>FR</u>
Dist Date:	<u>10/20/21</u>
RU	PS
FG	TO
WC	TLO
ARCH	LTO
RPF	DMG
INSP	BOE
OTHER:	
FPS	<u>✓</u>
Status:	<u>LOC</u>

The harvest area is located along State Highway 4, a National Scenic Highway. State Highway 4, besides being the major road used by local year-round residents, is highly traveled by recreational visitors in the summer months, and the only access to Bear Valley Ski Resort in the winter months.

Half the timber tracts identified for harvesting (1587m, 1529m, 3557m, 3370m, 3460m, 3451m, 3506m, 3351m, and 3381m) border State Highway 4 and the remaining tracts are located relatively close to the highway. This THP area is definitely highly visible to all travelers along Highway 4. Furthermore, a good portion of the harvest is adjacent to Cottage Springs, a residential area comprised of permanent residents as well as seasonal homes.

The THP is required to, but does not, consider or propose any mitigation measures for visual impacts along this scenic highway. EPFW recommends that, at least, such mitigation must include 200 feet setback from any roads used by the public, areas visible from local homes, and highly used recreational areas.

Finally, CEQA requires that different alternatives be considered. Section 3 of the Grindstone THP identifies six different project alternatives that include the project as proposed in the THP, alternate sites, public acquisition of property, no project, etc. However, the THP never considers as an alternative, selective harvest. If it had been considered, it would have retained the look of a natural forest, avoided the use of herbicides, maintained canopy cover similar to the adjacent forests important for slowing snow melt, and minimizing impacts on wildlife while also not creating negative visual impacts.

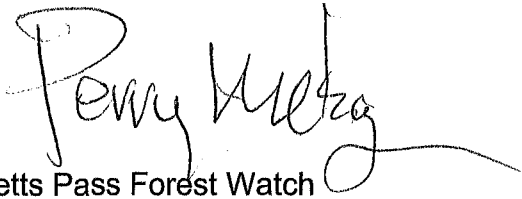
EPFW believes that the Grindstone THP cannot be approved as written and ask that it be denied unless the inadequacies addressed in our letter are properly addressed.

Thank you for your serious consideration of our comments.

Sincerely,

Perry Metzger

President, Ebbetts Pass Forest Watch

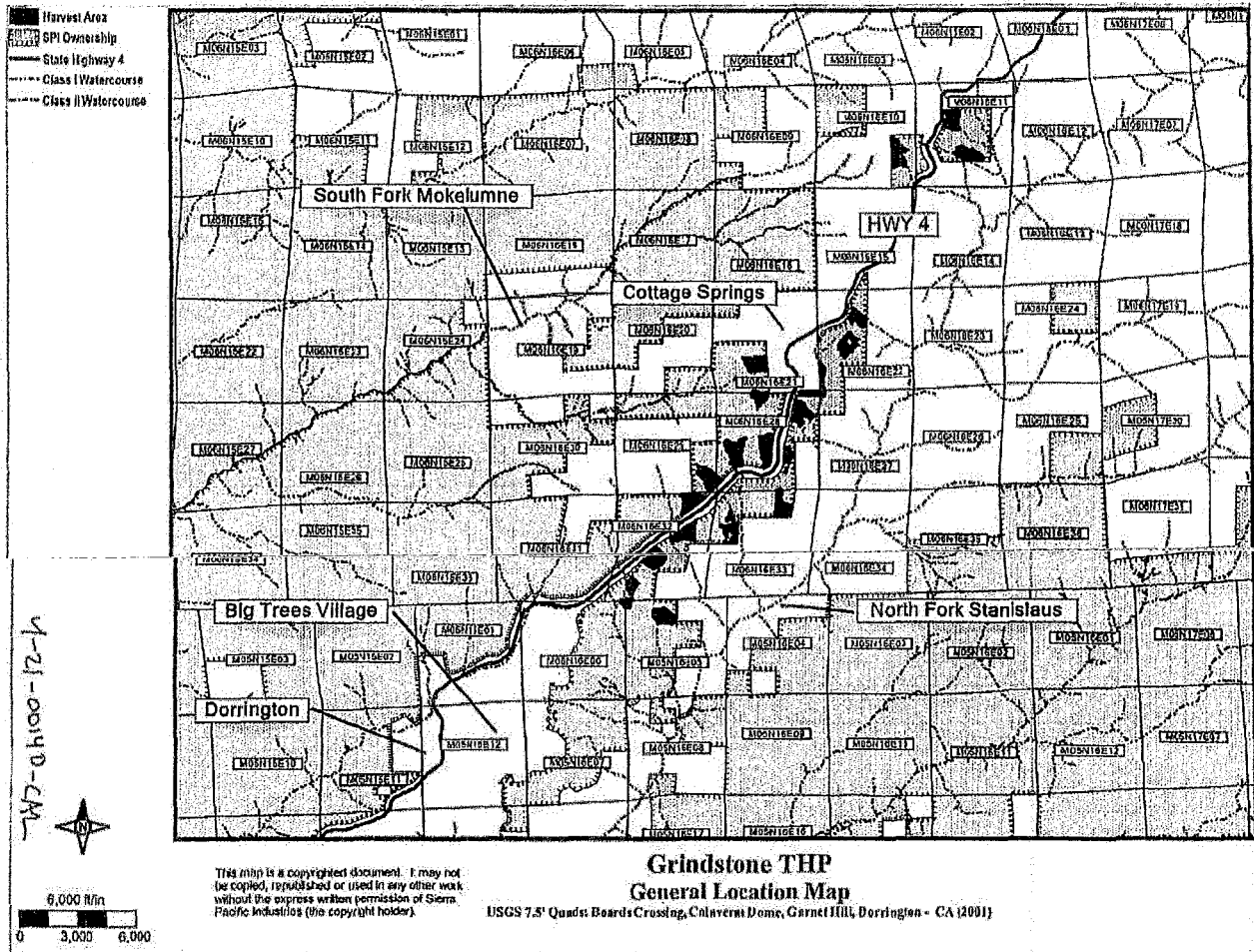
A handwritten signature in black ink, appearing to read "Perry Metzger", with a long, sweeping horizontal line extending to the right.

Copy Furnished:

Merita Callaway, Calaveras County Board of Supervisor, District 3, 891 Mountain Ranch Road, San Andreas, CA 95249

Calaveras Enterprise, 15 Main St., San Andreas, CA 95249

Big Trees Village Home Owners Association, Camp Connell, CA





October 29, 2021

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OCT 26 2021

CA. DEPT. OF FORESTRY  
RESOURCE MANAGEMENT

Forest Practice Program Manager  
CAL FIRE  
1234 East Shaw Avenue  
Fresno, California 93710

#3

Reviewed by: <u>R</u>	
Dist. by: <u>R</u>	
Dist. Date: <u>10/26/2021</u>	
RU <u>CV</u>	PS
FG <u>  </u>	TO
WQ <u>  </u>	TLO
ARCH <u>  </u>	LTO
RPF <u>  </u>	DMG
INSP <u>  </u>	BOE
OTHER: <u>  </u>	
FPS <u>  </u>	
Status: <u>Loc</u>	

Comments from Rob Hendrickson on THP 4-21-00140 (Grindstone)

To whom it may concern:

I have a home at 1607 Pebble Beach Way, Arnold, and regularly ski at Bear Valley. The following comments concern the inadequacy of the **Cumulative Visual Impacts analysis** in the 4-21-00140-CAL, Grindstone Timber Harvest Plan (THP).

The Grindstone THP consists of 368-acre timber harvest of which 332 acres is alternative prescription harvest. The alternative prescription harvest described is for all intent and purposes clear-cuts, harvested in groupings up to 22 acres in size. Post-harvest stocking for alternative prescription lands consists of even-aged management (i.e., clearcutting followed by replanted plantations) with a 125-point count (i.e., 125 surviving and growing same age trees per acre) within 5-years post-harvest. The Grindstone THP area is located approximately 3 miles northeast of Dorrington in the area surrounding Cottage Springs.

The THP is required to, but does not, include an adequate analysis for visual impacts. It simply concludes that, after considering visual resources,

there are no impacts (Cumulative Impacts Assessment Overview, page 127). The THP contains zero evidence of any consideration that it complies with California Environmental Quality Act (CEQA).

- First, the THP does not identify the qualifications of the person preparing the visual impacts review. An independent, qualified person should be included in this review to assess these visual impacts.
- Second, the THP fails to include any technical or professional evaluation of impacts. It only falsely states that "there are few if any vantage points within 3 miles where THP operations will be visible to significant numbers of people" (Section 4, E. Visual Resources, page 189). The THP further misstates that "the majority of the THP area is located on canyon terrain with a south facing aspect and geographically is not generally visible to significant numbers of people".
- Minimal consideration is given to visual impacts from post-harvest stocking, where even-aged tree plantations will replace a natural looking forest.

The harvest area is located along State Highway 4, a National Scenic Highway. State Highway 4, besides being the major road used by local year-round residents, is highly traveled by recreational visitors in the summer months, and the only access to Bear Valley Ski Resort in the winter months.

Half the timber tracts identified for harvesting (1587m, 1529m, 3557m, 3370m, 3460m, 3451m, 3506m, 3351m, and 3381m) border State Highway 4

and the remaining tracts are located relatively close to the highway. This THP area is definitely highly visible to all travelers along Highway

4. Furthermore, a good portion of the harvest is adjacent to Cottage Springs, a residential area comprised of permanent residents as well as seasonal homes.

The THP is required to, but does not, consider or propose any mitigation measures for visual impacts along this scenic highway. EPFW recommends that, at least, such mitigation must include 200 feet setback from any roads used by the public, areas visible from local homes, and highly used recreational areas.

Finally, CEQA requires that different alternatives be considered. Section 3 of the Grindstone THP identifies six different project alternatives that include the project as proposed in the THP, alternate sites, public acquisition of property, no project, etc. However, the THP never considers as an alternative, selective harvest. If it had been considered, it would have retained the look of a natural forest, avoided the use of herbicides, maintained canopy cover similar to the adjacent forests important for slowing snowmelt, and minimizing impacts on wildlife while also not creating negative visual impacts.

EPFW believes that the Grindstone THP cannot be approved as written and ask that it be denied unless the inadequacies addressed in our letter are properly addressed.

Thank you for your serious consideration of our comments.

Sincerely,

**Rob Hendrickson**

1607Pebble Beach Way  
Arnold Ca

Sincerely,

A handwritten signature in blue ink, appearing to be 'Rob', with a long horizontal stroke extending to the right.

Rob Hendrickson

1607Pebble Beach Way  
Arnold Ca

95223



**Central Sierra Environmental Resource Center**  
Box 396 Twain Harte, CA 95383 (209) 586-7440 FAX (209) 586-4986  
Visit our website at: [www.cserc.org](http://www.cserc.org) or contact us at: [johnb@cserc.org](mailto:johnb@cserc.org)

October 26, 2021

CAL FIRE Review Team  
Forest Practice Program Manager  
CAL FIRE  
1234 East Shaw Avenue  
Fresno, CA 93710-7899  
(559) 222-3714

**RECEIVED**  
**OCT 27 2021**

CA. DEPT. OF FORESTRY  
RESOURCE MANAGEMENT

Reviewed by:	<u>VR</u>
Dist. by:	<u>JD</u>
Dist. Date:	<u>10/27/2021</u>
RU	<u>100</u> PS
FG	TO
WQ	TLO
ARCH	LTO
RPF	DMG
INSP	BOE
OTHER:	
FPS	<u>✓</u>
Status:	<u>LOC</u>

**RE: THP 4-21-00140-CAL (Grindstone THP)** #4

Dear Forest Practice Program Manager,

The Central Sierra Environmental Resource Center (CSERC) submits these comments in response to the Grindstone THP. The Grindstone THP would allow 43 acres of selection logging, 332 acres of alternative prescription, and 13 acres of fuel break / defensible space. The total project acreage of this THP is 380 acres; in addition to 120 acres of operational buffer.

The Grindstone THP area is located in the Big Rattlesnake Creek, Little Rattlesnake Creek, and Mill Creek watersheds, which eventually flow into the North Fork of the Stanislaus River. These watersheds have a long history of being logged. The project area has been logged using evenage and selection silviculture several times over the past 50-100 years and multiple times in the last decade - e.g. Village THP (575 acres), Geazzer (3 acres), and Sour Boards (403 acres). In addition, the Rattlesnake THP (~255 acres) is planned to occur in the next 2 years.

The project area predominantly has slopes with moderate erosion hazard ratings, and SPI plans to operate heavy machinery, construct landings, construct roads, and use tractor watercourse crossings in winter. There are 550 feet of seasonal road that will be constructed in the project area. There is suitable habitat for Pacific fisher, California Spotted Owl, and the THP acknowledges the presence of one historical Northern Goshawk nest site. In addition, foothill yellow-legged frogs and Sierra Nevada yellow-legged frogs have potential suitable habitat throughout the Biological Assessment Area (BAA).

#### **CSERC provides the following specific comments.**

While many of these comments are re-statements of comments we have previously submitted for similar THPs, the fact that SPI continues to submit similar THP plans makes repetitive use of our comments both logical and necessary. Until such time that SPI THPs

adjust to respond to the key issues we have identified, many of our comments may be redundant with previously submitted comments.

## **Winter Operations**

During the fall, winter, and early spring periods, soils are often saturated for extensive periods of time. This THP, as proposed, would allow mechanical site preparation, the use of class III watercourse crossings, road construction, and landing construction during winter months under the Winter Period Operation Plan (WPOP) and Ground Conditions. The Ground Conditions in the WPOP restrict operations during the winter period with the requirement that "*operations may take place during extended dry periods when roads and landings are generally firm and easily passable or during hard frozen conditions*" (page 34). Our center asserts that it is highly unlikely that field employees doing logging operations will be able to accurately and neutrally judge the true conditions of the soils.

### **COMMENT: We recommend that a neutral party be given the authority to make soil condition determinations that allow winter season operations.**

The THP states that roads and landings will be "hydrologically disconnected from watercourses and lakes to the EXTENT FEASIBLE" (page 24). This wording shows that the applicant cannot guarantee that erosion into waterways will not occur, therefore they cannot ensure that water quality will not be adversely impacted. In addition, the inability to actually monitor the effects of winter operation on water quality underscores the need to limit operation to dry months.

As noted in our comments above, it is challenging for a field employee to accurately judge the conditions of the soils under winter conditions, and it is also unlikely that a timber operator would be able to judge whether or not the sediment deposited in streams has increased turbidity to unacceptable levels or whether the sediment visually observed has exceeded water quality standards. This THP would allow mechanical site prep to be conducted during the winter period, "on slopes less than 40% tractors and excavators may be used to mechanically clear brush and slash within the Alternative areas... mechanical site preparation will not occur on slopes over 40% during the winter period" (page 15). All of this work creates the potential for a significant amount of sediment runoff into downslope streams to occur throughout the project area which has a moderate erosion hazard rating. Class III watercourse crossing may occur during the Winter Period. Temporary tractor road crossings of Class III watercourse may be constructed and used during the winter period if the watercourse is dry.

It is important for CAL FIRE to ensure that regulatory requirements related to winter conditions are verified by either some measurement standards that can be assessed for accuracy, or that the determination for soil conditions or turbidity in streams be assessed by a third party with neutrality. CSERC respectfully presses for CAL FIRE to avoid approving winter season operations based entirely on unsubstantiated claims by project operators that their operations are not affecting water quality.

Road conditions, skid trail conditions, and other areas across the project sites will vary widely in terms of soil saturation due to slope, exposure, etc. Some soils (such as on north



or east-facing slopes) may be saturated, while others (drier south-facing slopes) may not be saturated, making it challenging to assess the extent of saturated conditions that are likely to produce significant sediment discharge. Therefore, our Center continues to oppose allowing timber operations during the winter period; but if winter operations are approved, we ask for the following.

**COMMENT: The Director should require a neutral party to judge road conditions, soil saturations, and to the extent feasible to monitor the turbidity of streams on a regular basis during rain events -- both during operations and following timber operations. This will provide actual data that would potentially reveal whether water quality standards are indeed being met.**

## **Herbicide Use**

The THP asserts that the actual use of a particular herbicide is not certain for this THP (page 219), however, SPI consistently applies herbicides whenever desirable in site preparation and reforestation treatments. As our Center has communicated in the past, it is misleading and inaccurate for the THP to fail to provide clear mitigation requirements for the application of herbicides since herbicide use for site preparation prior to reforestation is a direct consequence of forest clearing allowed by the THP.

**COMMENT: CSERC asks that this THP provide accurate and realistic mitigation for the cumulative effects of SPI's widespread use of herbicides that follows logging in the vast majority of THPs approved on its lands within the local region. In particular, widespread herbicide use diminishes broadleaf hardwoods such as dogwoods, alders, maples, and oaks. CSERC asks that this THP provide clear mitigation requiring SPI to avoid small dogwoods, alders, and maples within the project area IF herbicides are applied within five years of the completion of logging within any unit of this THP.**

## **Water Drafting**

Water drafting guidelines Section II Item 38 on page 69 state that "Water shall be drafted at a rate not to exceed 250 gallons per minute".

Water drafting is typically required when timber operations occur during the dry summer months for dust abatement. While CSERC supports the efforts to reduce dust levels for public safety and water quality, in dry or drought conditions, any removal of water from low-flowing streams will further stress aquatic species.

There is potential suitable habitat for the Sierra Nevada yellow-legged frog (SNYF) and foothill yellow-legged frog (FYLF) as note: "breeding habitat exists along reaches of the North Fork Stanislaus River within the THP Biological Assessment Area (BAA)" (p. 61). As a federally and state endangered species avoiding detrimental effects to their potential suitable habitats is critical.



**COMMENT: We ask that CAL FIRE direct SPI to follow the same water drafting standards as the Forest Service. BMP 2.5 - relative to logging operations on lands within the Stanislaus Forest.**

## **Raptor Protections**

There is one known historic Northern Goshawk nest site within the project area. Northern Goshawks are a species of concern and need careful protection around any nest stand.

**Our Center strongly asserts that pre-operational surveys should be required within and around the proposed harvest area in suitable habitat in order to ensure that any nesting CA Spotted Owl or Northern Goshawk is identified, and that neither Spotted Owls or Goshawks are disturbed.**

Requiring pre-operational surveys has far higher potential to effectively locate birds prior to disturbance instead of waiting until after operations have started and then expect that raptors can then simply be discovered during timber operations.

**COMMENT: If pre-treatment surveys for nesting raptors of concern and other nesting birds are not conducted in the treatment area by a qualified biologist, then timber operations should not be allowed to occur during nesting season (between February 15 through September 30) to allow young time to fledge.**

## **Amphibian Protections**

As noted in previous comments related to water drafting, Foothill yellow-legged frogs (FYLF) and Sierra Nevada yellow-legged frogs (SNYF) have suitable breeding habitat along the reaches of the North Fork Stanislaus. Even though 2018 surveys did not find FYLF or SNYF, it doesn't provide any assurance that these species are not present in or adjacent to the project area.

**COMMENT: Our Center strongly asserts that pre-operational surveys should be required within and around the proposed harvest area in suitable habitat in order to ensure that SNYF and FYLF are not disturbed by project operations.**

If a positive detection occurs for FYLF during surveys or at any time during timber operations, all vegetation and ground disturbing operations should be required to cease within adjacent suitable habitat and a buffer of 40 feet of the observation during the seasonal dry period and within 130 feet during the seasonal wet period. If positive detections occur for SNYF during surveys or at any time during timber operations, all vegetation and ground disturbing operations should be required to cease, and a no-operations buffer within 25 meters of the observation and adjacent suitable habitat should be mandated.

## Need for Habitat Protection for the Pacific Fisher

The proposed project, along with nearby past, future, and current projects, significantly and cumulatively reduces forest connectivity (especially of mature conifers) which thus reduces suitable habitat for any fishers that may potentially be present within the project area. The proposed THP assumes that project activity in this region has no detectable effect on sensitive species such as the American Marten and Pacific Fisher.

**Unless protocol-consistent surveys are first conducted in the project area, the THP cannot legally base wildlife impact determinations upon the unconfirmed assumption that a rare animal is not present.**

**COMMENT: CSERC urges that either protocol-consistent photo-detection surveys or track plate surveys be required prior to project operations.**

Habitat fragmentation is one of the main threats to the fisher according to CDFG's "A Status Review of the Fisher (*Martes pennanti*) in California (2010)," *the fisher's ability to survive in areas that have had various silvicultural treatments depends on the size, distribution and type of those operations. "Fishers are negatively associated with clearcuts and habitats that are nearly or completely surrounded by clearcuts (Rosenberg and Raphael 1986) (CDFG, 2010)." Throughout this Report, fisher mortality was directly correlated with current timber harvesting practices place is fisher habitat.*

Science has shown that fisher mortalities increase in heavily harvested areas due to the reduction of habitat quality (Kelly 1977; Weir and Harstad 1997; Simpson Resource Company 2003). The fisher, especially females, have small home ranges, making them more susceptible to predation in areas with fragmented habitat (Buck et al, 1994:373-374).

It has been well documented that fishers are forest specialists that prefer late seral forests for denning and resting. Late seral forest characteristics such as dense canopy cover, large diameter trees, large snags, large down logs, and understory vegetation of late seral forests for foraging are critical for the fisher survival. Such habitats as described above can be considered the Department's preliminary assessment of essential habitats and habitat elements for the fisher (CDFG).

*The fisher is one of several species selected to illustrate conservation issues with the Sierra Nevada and Cascade bioregion. Portions of the account from the 2007 CDFG report are as follows: "...the status of the Pacific fisher is one indicator of the status of forest condition of the Sierra, particularly the old-growth component" (CDFG 2007). On June 15, 2020 the Southern Sierra Nevada DPS of fisher (*Pekania pennanti*) (SSN DPS) was added as an endangered species to the List of Endangered and Threatened Wildlife in title 50 of the Code of Federal Regulations at [50 CFR 17.11\(h\)](#).*

### **Fish and Wildlife Services basis for action:**

*The implications for the DPS's status were **loss and fragmentation of habitat...**(i.e., loss of snags and other large habitat structures on which the species relies), climate change, and tree mortality from drought, disease, and insect infestations (Fish and Wildlife Services). The Conservation of the Pacific fisher is dependent upon the*

approaches to and success of restoring healthy and diverse forest ecosystems along the Sierra range” (CDFG 2007:301).

This THP will continue to exacerbate the loss of fisher habitat and is not responsive to the latest science. Accordingly, as a CEQA equivalent planning assessment, this THP should reasonably mitigate for potential significant impacts that would occur if this THP further reduces suitable fisher habitat by removing large trees, large snags, large down logs, and closed canopy forest conditions.

**COMMENT: CSERC asks that either SPI be required to undertake furbearer photo-detection (or track plate) surveys consistent with scientific protocols within all project units within the plan area prior to any approval of the THP, or that SPI be required to retain fisher movement corridor areas with a minimum 60% canopy cover that should retain all large snags (16" dbh>), large diameter living trees (24" dbh>), and all large diameter down logs (20" dbh) along a 200' wide swath across the project units so as to ensure there is suitable habitat for fisher movement -- not just at the present, but into future decades as the tree plantations gradually evolve into young forest stands.**

### **Evenaged Regeneration Size**

Section 953.6 states that SPI may use an alternative prescription when, “an alternative regeneration method or intermediate treatment offers a more effective or more feasible way of achieving the objectives of 913 [933, 953] than any of the standard silvicultural methods provided in this Article” (120). Therefore, SPI claims that the alternative prescription (AP) harvest is given an exception in this THP because it is the more effective way of giving consideration to regional economic vitality and aesthetic enjoyment. However, the little tree retention maintained in the AP treatments does little to help the poor aesthetic value that these AP areas of even-aged management (i.e., clearcutting followed by replanted plantations) with a 125-point count (i.e., 125 surviving and growing same age trees per acre) within 5-years post-harvest actually provide.

Giving an exception to AP treatments for “aesthetic enjoyment” is misleading and inaccurate. If SPI and CAL FIRE seriously desire to give consideration to regional economic vitality and aesthetic enjoyment, CAL FIRE should require SPI to adopt a THP based on variable retention principles, with stream corridors and patches or strips of wildlife movement/scenic value habitat left over at least 15% of each evenage unit in order to provide scenic benefits for enhancing tourism for economic vitality and true aesthetic enjoyment.

### **Visual impacts**

Our Center provides support of the comments submitted by Ebbetts Pass Forest Watch regarding visual impacts:

*The THP is required to, but does not, include an adequate analysis for visual impacts. It simply concludes that, after considering visual resources, there are no impacts (Cumulative Impacts Assessment Overview, page 127). The THP contains zero evidence of any consideration that it complies with California Environmental Quality Act (CEQA).*

*First, the THP does not identify the qualifications of the person preparing the visual impacts review. An independent, qualified person should be included in this review to assess these visual impacts.*

*Second, the THP fails to include any technical or professional evaluation of impacts. It only falsely states that "there are few if any vantage points within 3 miles where THP operations will be visible to significant numbers of people" (Section 4, E. Visual Resources, page 189). The THP further misstates that "the majority of the THP area is located on canyon terrain with a south facing aspect and geographically is not generally visible to significant numbers of people". Minimal consideration is given to visual impacts from post-harvest stocking, where even-aged tree plantations will replace a natural looking forest. The harvest area is located along State Highway 4, a National Scenic Highway. State Highway 4, besides being the major road used by local year-round residents, is highly traveled by recreational visitors in the summer months, and the only access to Bear Valley Ski Resort in the winter months.*

*Half the timber tracts identified for harvesting (1587m, 1529m, 3557m, 3370m, 3460m, 3451m, 3506m, 3351m, and 3381m) border State Highway 4 and the remaining tracts are located relatively close to the highway. This THP area is definitely highly visible to all travelers along Highway 4. Furthermore, a good portion of the harvest is adjacent to Cottage Springs, a residential area comprised of permanent residents as well as seasonal homes.*

*The THP is required to, but does not, consider or propose any mitigation measures for visual impacts along this scenic highway. EPFW recommends that, at least, such mitigation must include 200 feet setback from any roads used by the public, areas visible from local homes, and highly used recreational areas.*

*Finally, CEQA requires that different alternatives be considered. Section 3 of the Grindstone THP identifies six different project alternatives that include the project as proposed in the THP, alternate sites, public acquisition of property, no project, etc. However, the THP never considers as an alternative, selective harvest. If it had been considered, it would have retained the look of a natural forest, avoided the use of herbicides, maintained canopy cover similar to the adjacent forests important for slowing snowmelt, and minimizing impacts on wildlife while also not creating negative visual impacts.*

## **Significant Cumulative Impacts**

As noted in the first paragraph of these comments, this THP would allow for 332 acres of alternative prescription (evenage logging) similar to clearcut logging treatments. This will continue to cumulatively diminish the number of medium and large conifer trees in the

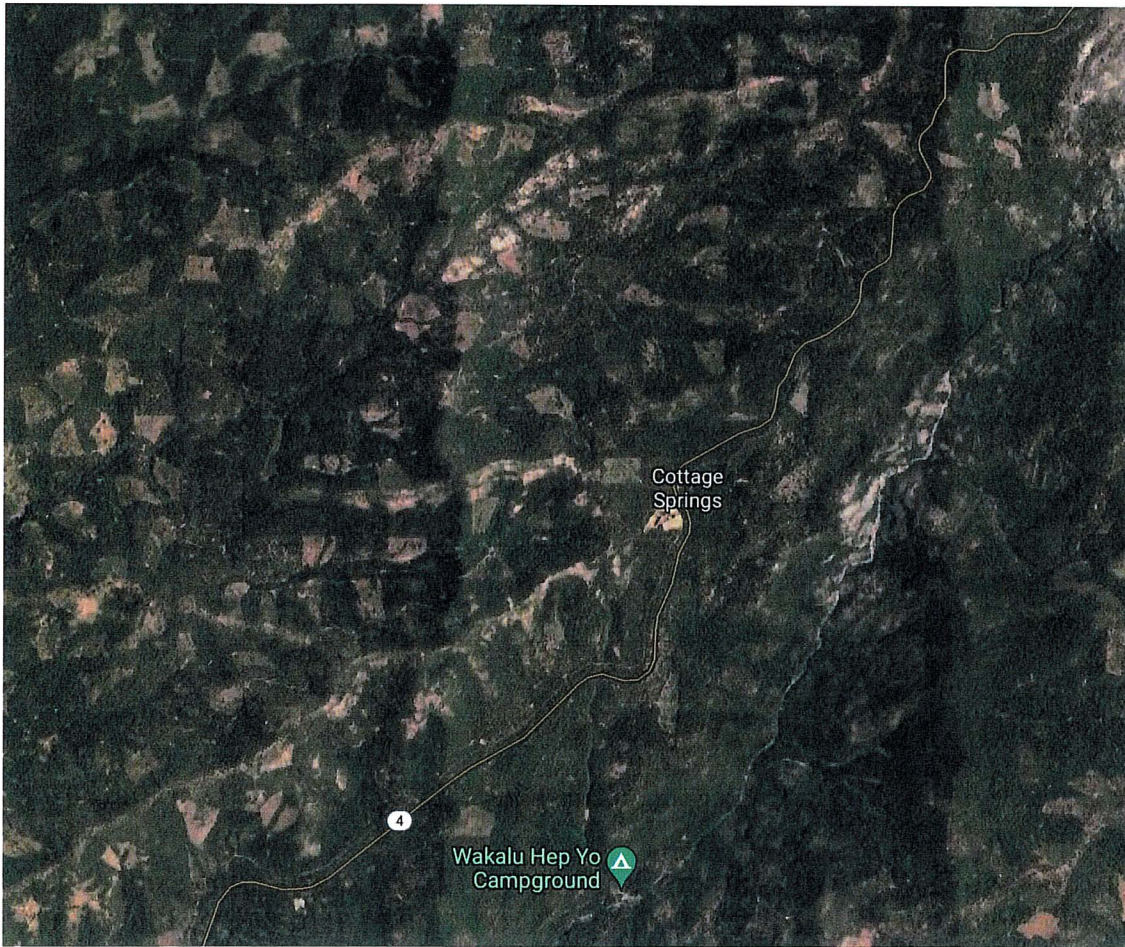
project area and further convert unevenaged biologically diverse forest habitat into uniform, much more simplified and sterile habitat conditions as young tree plantations eventually grow into tree farm crops. The Project area has already been logged multiple times over more than a century and many times in recent years such as the past decade - e.g. 2019 Village THP, 2019 Geazzer, and 2018 Sour Boards. In addition, the Rattlesnake THP is planned to occur in the next 2 years. This area contains primarily second and third growth mixed conifer timber stands. All the previous associated SPI projects have reduced canopy cover and degraded habitat for many wildlife species -- e.g. Pacific fisher, American marten, Northern Goshawk, Northern flying squirrel, and many more.

The Google Earth images below of this THP area and the surrounding area show how a checkerboard of clear-cuts already has SIGNIFICANTLY diminished mature forest habitat, created denuded or heavily disturbed watershed conditions, and degraded scenic, watershed, and soil resources. **Approval of this THP as is currently proposed will add to the continued cumulative degradation of watershed and forest health.**

With these comments, CSERC fully recognizes SPI's right to manage and operate treatments on the company's private lands in a manner that complies with Forest Practice Rules and other applicable regulatory requirements. However, due to the **cumulative negative impacts** of this project, combined with not only recent logging operations by SPI within the general project area over the past two decades, but also with the wide-ranging conversion of mixed, unevenage forest habitat into sterile young even-age tree plantations across adjacent areas, CSERC strongly asserts that it is inconsistent with allowing a THP as a CEQA equivalent analysis for CAL FIRE to ignore the cumulative effects of all of these additive impacts.

The Director is legally required to consider the cumulative significant impacts of this THP and the associated impacts from all the adjacent even age treatments to the project area. This THP will not simply result in an isolated negative effect, but it will result in a contributing impact as part of a series of cumulative effects from SPI forest treatments that have taken place and continue to take place throughout the overall forest region overlapping with this specific THP project area.





Project area is surrounded by a patchwork of heavily logged areas.

**COMMENT: Our center urges the Director to coordinate with CDFW to develop an appropriate mitigation plan to decrease the impacts of this THP combined with past, present, and foreseeable future projects to reduce the potential for negative cumulative effects to below a level of significance.**

*Caitlyn Rich*

Caitlyn Rich, Biologist

*John Buckley*

John Buckley, Executive Director

**References:**

California Department of Fish and Game. 2010. A Status Review of the Fisher (*Martes pennanti*) in California.

Fish and Wildlife Service. 2020. Endangered and Threatened Wildlife and Plants; Endangered Species Status for Southern Sierra Nevada Distinct Population Segment of Fisher. The Daily Journal of the United States Government. Available at: <https://www.federalregister.gov/documents/2020/05/15/2020-09153/endangered-and-threatened-wildlife-and-plants-endangered-species-status-for-southern-sierra-nevada>

State of California. 2007. *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*. California Regional Water Quality Control Board, Central Valley Region, Sacramento, CA. October 2007. Available at: [http://www.waterboards.ca.gov/centralvalley/water\\_issues/basin\\_plans/sacsjr.pdf](http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr.pdf)

Vance, Julie A. – Regional Manager (CDFW). Letter to Kiniery, Kevin, Review Team Chair (California Department of Forestry and Fire Protection). Oct. 20, 2020. Memorandum: First Review for Timber Harvesting Plan 4-20-00185TUO.



**Zuluaga, Yanik@CALFIRE**

**From:** Constance Cook <cecook19@gmail.com>  
**Sent:** Wednesday, October 27, 2021 7:59 PM  
**To:** Fresno Review Inbox@CALFIRE  
**Subject:** Grindstone Timber Harvest Project Comments

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RESOURCE MANAGEMENT

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Forest Practice Program  
Manager

CAL FIRE

1234 East Shaw Avenue

Fresno, California 93710

#5

Reviewed by: <u>RE</u>	
Dist. by: <u>R</u>	
Dist. Date: <u>11/1/2021</u>	
<u>RU</u> <u>100</u>	PS
FG	TO
WQ	TLO
ARCH	LTO
<u>RPF</u>	DMG
<u>INSP</u>	BOE
OTHER:	
FPS	<u>✓</u>
Status: <u>LDC</u>	

October 27, 2021

Comments from Constance Cook on THP 4-21-00140 (Grindstone)

To whom it may concern:

The following comments concern the inadequacy of the **Cumulative Visual Impacts analysis** in the 4-21-00140-CAL, Grindstone Timber Harvest Plan (THP).

Grindstone THP consists of 368-acre timber harvest of which 332 acres is alternative prescription harvest. The alternative prescription harvest described is for all intent and purposes clear-cuts, harvested in groupings up to 22 acres in size. Post-harvest stocking for alternative prescription lands consists of even-aged management (i.e., clearcutting followed by replanted plantations) with a 125-point count (i.e., 125 surviving and growing same age trees per acre) within 5-years post-harvest.

The Grindstone THP area is located approximately 3 miles northeast of Dorrington in the area surrounding Cottage Springs.

The THP is required to, but does not, include an adequate analysis for visual impacts. It simply concludes that, after considering visual resources, there are no impacts (Cumulative Impacts Assessment Overview, page 127). The THP contains zero evidence of any consideration that it complies with California Environmental Quality Act (CEQA).

- First, the THP does not identify the qualifications of the person preparing the visual impacts review. An independent, qualified person should be included in this review to assess these visual impacts.

- Second, the THP fails to include any technical or professional evaluation of impacts. It only falsely states that “there are few if any vantage points within 3 miles where THP operations will be visible to significant numbers of people” (Section 4, E. Visual Resources, page 189). The THP further misstates that “the majority of the THP area is located on canyon terrain with a south facing aspect and geographically is not generally visible to significant numbers of people”.
- Minimal consideration is given to visual impacts from post-harvest stocking, where even-aged tree plantations will replace a natural looking forest.

The harvest area is located along State Highway 4, a National Scenic Highway. State Highway 4, besides being the major road used by local year-round residents, is highly traveled by recreational visitors in the summer months, and the only access to Bear Valley Ski Resort in the winter months.

Half the timber tracts identified for harvesting (1587m, 1529m, 3557m, 3370m, 3460m, 3451m, 3506m, 3351m, and 3381m) border State Highway 4 and the remaining tracts are located relatively close to the highway. This THP area is definitely highly visible to all travelers along Highway 4. Furthermore, a good portion of the harvest is adjacent to Cottage Springs, a residential area consisting of permanent residents as well as seasonal homes.

The THP is required to, but does not, consider or propose any mitigation measures for visual impacts along this scenic highway. EPFW recommends that, at least, such mitigation must include 200 feet setback from any roads used by the public, areas visible from local homes, and highly used recreational areas.

Finally, CEQA requires that different alternatives be considered. Section 3 of the Grindstone THP identifies six different project alternatives that include the project as proposed in the THP, alternate sites, public acquisition of property, no project, etc. However, the THP never considers as an alternative, selective harvest. If it had been considered, it would have retained the look of a natural forest, avoided the use of herbicides, maintained canopy cover similar to the adjacent forests important for slowing snowmelt, and minimizing impacts on wildlife while also not creating negative visual impacts.

EPFW believes that the Grindstone THP cannot be approved as written and ask that it be denied unless the inadequacies addressed in our letter are properly addressed.

Thank you for your serious consideration of our comments.

Sincerely,

Constance Cook

[cecook19@gmail.com](mailto:cecook19@gmail.com)

Murphys, CA